CYTOGEN CORP Form S-3 November 05, 2004

As filed with the Securities and Exchange Commission on November 5, 2004 Registration Statement No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CYTOGEN CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware 22-2322400

(State or Other Jurisdiction

(I.R.S. Employer

(State or Other Jurisdiction of Incorporation or Organization)

Identification Number)

650 College Road East, 3rd Floor Princeton, New Jersey 08540 (609) 750-8200

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

William J. Thomas, Esq.
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(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

COPY TO:

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO PUBLIC: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. $[\]$

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [x]

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box

| and list | the | Securiti | ies Ac | t r | egis | strat | ion | statement | number | of the | earlier |
|-----------|-------|----------|--------|-----|------|-------|------|-----------|--------|--------|---------|
| effective | regis | stration | statem | ent | for | the | same | offering. | [] | • | |

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. $[\]$

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. $[\]$

CALCULATION OF REGISTRATION FEE

| Title Of Each Class of Securities To Be Registered | Amount to be Registered | Proposed Maximum Aggregate Offering Price | |
|---|----------------------------|---|--|
| Debt Securities | | | |
| Common stock, \$0.01 par value per share(1) | | | |
| Preferred Stock, \$0.01 par value per share | | | |
| Warrants | | | |
| Units | | | |
| Total(4) | \$70,000,000(2) | \$70,000,000(2)(3) | |

- (1) Includes rights to purchase shares of our Series C Junior Participating Preferred Stock pursuant to the Amended and Restated Rights Agreement dated October 19, 1998. No separate consideration is paid for these rights and, as a result, the registration fee for these rights is included in the fee for the common stock.
- (2) The securities registered consist of \$70,000,000 of an indeterminate number or amount of debt securities, common stock, preferred stock, warrants and/or units, as may be issued from time to time at indeterminate prices. In no event will the aggregate initial offering price of all securities issued from time to time pursuant to this registration statement exceed \$70,000,000 or the equivalent thereof in foreign currencies, foreign currency units or composite currencies. Such amount represents the issue price rather than the principal amount of any debt securities issued at original issue discount or liquidation value of any shares of preferred stock.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) of the Securities Act of 1933, as amended (the "Securities Act"). Exclusive of accrued interest, distributions and dividends, if any. Rule 457(o) permits the registration fee to be calculated on the basis of the maximum offering price of all of the

securities listed and, therefore, the table does not specify by each class information as to the amount to be registered or the proposed maximum offering price per security.

(4) This registration statement also registers such indeterminate amounts of securities as may be issued from time to time upon conversion, exercise or settlement of, or in exchange for, the securities registered hereunder and, pursuant to Rule 416(a) under the Securities Act of 1933, as amended, such indeterminable number of shares as may be issued from time to time as a result of anti-dilution provisions thereof or upon conversion or exchange as a result of stock splits, stock dividends or similar transactions.

THE COMPANY HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE COMPANY SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8 (A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8 (A), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING OFFERS TO BUY THESE SECURITIES IN ANY STATE OR JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED NOVEMBER 5, 2004

PROSPECTUS

CYTOGEN CORPORATION

\$70,000,000

DEBT SECURITIES
COMMON STOCK
PREFERRED STOCK
WARRANTS
UNITS

Cytogen Corporation may offer up to \$70,000,000 of debt securities, common stock, preferred stock, warrants and units, from time to time. This prospectus describes the general terms of, and the general manner in which we will offer, these securities. When we offer these securities, we will provide a prospectus supplement containing the specific terms of that offering. The prospectus supplement will also describe the specific manner in which we offer these securities. This prospectus may not be used to consummate sales of these securities unless accompanied by a prospectus supplement.

Our common stock is traded on the Nasdaq National Market under the symbol "CYTO." On November 3, 2004, the closing sale price of our common stock on Nasdaq was \$10.26 per share. You are urged to obtain current market quotations for our common stock.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" COMMENCING ON PAGE 4.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is November , 2004.

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fluctuate significantly..... We have adopted various anti-takeover provisions which may affect the market price of our common stock and prevent or frustrate attempts by our stockholders to replace or remove our management team..... The liquidity of our common stock could be adversely affected if we are delisted from The Nasdaq National Market..... A large number of our shares are eligible for future sale which may adversely impact the market price of our common stock..... Because we do not intend to pay, and have not paid, any cash dividends on our shares of common stock, our stockholders will not be able to receive a return on their shares unless the value of our shares appreciates and they sell them..... 23 Special Note Regarding Forward-Looking Statements..... Use of Proceeds..... Ratio of Earnings to Fixed Charges and Preferred Stock Dividends..... Description of Debt Securities..... Description of Capital Stock..... Description of Warrants.... Description of Units..... Global Securities..... Plan of Distribution..... Legal Matters..... Experts.... Where You Can Find More Information..... Information Incorporated By Reference.....

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission using a "shelf" registration or continuous offering process. We may from time to time sell debt securities, common stock, preferred stock, warrants and/or units in one or more offerings up to a total dollar amount of \$70,000,000.

Each time we sell these securities we will provide you with a prospectus supplement containing specific information about the terms of each such sale.

This prospectus may not be used to sell any of the securities unless accompanied by a prospectus supplement. The prospectus supplement also may add, update or change information in this prospectus. If there is any inconsistency between the information in the prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement. You should read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information" beginning on page 41 of this prospectus.

Unless otherwise indicated or unless the context otherwise requires, all references in this prospectus to "we," "us," or similar references mean Cytogen Corporation and its subsidiaries.

You should rely only on the information contained in this prospectus or in a prospectus supplement or amendment. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. We may offer to sell, and seek offers to buy these securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus or a prospectus supplement or amendment or incorporated herein by reference 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.

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CYTOGEN CORPORATION

Cytogen Corporation is a product-driven biopharmaceutical company that develops and commercializes innovative molecules that can be used to build leading franchises across multiple markets. Our marketed products include QuadrametTM (samarium Sm-153 lexidronam injection), a long-acting, non-opioid treatment for the relief of pain due to metastatic bone disease arising from prostate, breast, multiple myeloma and other types of cancer, and ProstaScint(R) (capromab pendetide) kit for the preparation of Indium In-111 capromab pendetide, the first and only commercial monoclonal antibody-based molecular imaging agent targeting prostate-specific membrane antigen, or PSMA, used to image the extent and spread of prostate cancer, in the United States. We are also developing therapeutics targeting prostate-specific membrane antigen (PSMA), a protein highly expressed on the surface of prostate cancer cells and the neovasculature of solid tumors.

In addition to the products listed above, in August, 2000, we expanded our product pipeline by entering into marketing, license and supply agreements with Advanced Magnetics, Inc. for Combidex(R). We have exclusive United States marketing rights to Combidex for all indications. Combidex (ferumoxtran-10) is an investigational molecular imaging agent consisting of iron oxide nanoparticles, which is currently being developed for use in conjunction with magnetic resonance imaging to aid in the differentiation of cancerous and non-cancerous lymph nodes, and is currently under review by the U.S. Food and Drug Administration (FDA). In September 2004, Advanced Magnetics submitted a complete response to an approvable letter received in June 2000 from the FDA for Combidex. The complete response was accepted by the FDA and was assigned a user fee goal date of March 30, 2005.

We have had a history of operating losses since our inception. We had a net loss of \$5.6 million for the three months ended September 30, 2004, a net loss of \$14.3 million for the nine months ended September 30, 2004 and a net loss of \$9.4 million for the year ended December 31, 2003. Although we continually look to expand our product pipeline, we currently rely on two products, ProstaScint and Quadramet, for substantially all of our revenues. In addition, we have, from

time to time, ceased sales of certain products, such as brachytherapy products and OncoScint(R) CR/OV, that we previously believed would generate significant revenues for our business. Our products are subject to significant regulatory review by the FDA and other federal and state agencies, which requires significant time and expenditures in seeking product approvals. In addition, we rely on collaborative partners to a significant degree to manufacture our products, to secure raw materials, and to provide licensing rights to their proprietary products for us to sell and market to others.

We are a Delaware corporation. We were incorporated and began operations in 1980 under the name Hybridex, Inc. and changed our name to Cytogen Corporation in April 1980. Our executive offices are located at 650 College Road East, Suite 3100, Princeton, New Jersey 08540, our telephone number is (609) 750-8200 and our Internet address is http://www.cytogen.com The information on our Internet website is not incorporated by reference in this prospectus. Unless the context otherwise requires references in this prospectus to "Cytogen," the "Company," "we," "us," and "our" refer to Cytogen Corporation and our subsidiaries.

ProstaScint(R) and OncoScint(R) are registered United States trademarks of Cytogen Corporation. We are the owner of a pending United States trademark application, Serial No. 78374967, relating to Quadramet. All other trade names, trademarks or service marks appearing in this Registration Statement on Form S-3 are the property of their respective owners, and not the property of Cytogen Corporation or any of our subsidiaries.

REVERSE STOCK SPLIT

On October 25, 2002, we received approval from our stockholders at a duly called and held special meeting of stockholders to effect a reverse split of our common stock. Our Board of Directors thereafter approved a one-for-ten reverse split of our outstanding, issued and authorized shares of

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common stock, which became effective on October 25, 2002. All numbers set forth in this Registration Statement on Form S-3 reflect the effect of such one-for-ten reverse stock split.

RISK FACTORS

INVESTING IN OUR COMMON STOCK OR OTHER SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE RISKS AND UNCERTAINTIES DESCRIBED BELOW BEFORE PURCHASING OUR SECURITIES. IF ANY OF THE FOLLOWING RISKS ACTUALLY OCCUR, OUR BUSINESS, FINANCIAL CONDITION OR RESULTS OF OPERATIONS WOULD LIKELY SUFFER. IN THAT CASE, THE TRADING PRICE OF OUR COMMON STOCK OR THE VALUE OF OUR OTHER SECURITIES COULD FALL, AND YOU MAY LOSE ALL OR PART OF THE MONEY YOU PAID TO BUY OUR SECURITIES.

WE HAVE A HISTORY OF OPERATING LOSSES AND AN ACCUMULATED DEFICIT AND EXPECT TO INCUR LOSSES IN THE FUTURE.

Given the high level of expenditures associated with our business and our inability to generate revenues sufficient to cover such expenditures, we have had a history of operating losses since our inception. We had a net loss of \$5.6 million for the three months ended September 30, 2004, a net loss of \$14.3 million for the nine months ended September 30, 2004 and a net loss of \$9.4 million for the year ended December 31, 2003. We had net losses of \$15.7 million and \$12.1 million for the years ended December 31, 2002 and 2001, respectively. We had an accumulated deficit of \$380 million as of September 30, 2004.

In order to develop and commercialize our technologies, particularly our prostate-specific membrane antigen technology, and expand our products, we expect to incur significant increases in our expenses over the next several years. As a result, we will need to generate significant additional revenue to become profitable.

To date, we have taken affirmative steps to rationalize our trend of operating losses. Such steps include, among other things:

- o undergoing steps to realign and implement our focus as a product-driven biopharmaceutical company;
- o establishing and maintaining our in-house specialty sales force;
- o reacquiring North American and Latin American marketing rights to Quadramet from Berlex Laboratories in August 2003; and
- o enhancing our marketed product portfolio through marketing alliances and strategic arrangements such as we have done with the Combidex product, which we intend to market if this product is approved by the FDA.

Although we have taken these affirmative steps, we may never be able to successfully implement them, and our ability to generate and sustain significant additional revenues or achieve profitability will depend upon the factors discussed elsewhere in this section entitled, "Risk Factors." As a result, we may never be able to generate or sustain significant additional revenue or achieve profitability.

WE DEPEND ON SALES OF PROSTASCINT AND QUADRAMET FOR SUBSTANTIALLY ALL OF OUR NEAR-TERM REVENUES.

We expect Quadramet and ProstaScint to account for substantially all of our product related revenues in the near future. Revenues from ProstaScint and Quadramet accounted for approximately 40% and 60%, respectively, of our product related revenues in the three months ended September 30, 2004, and 50% and 50%, respectively in the nine months ended September 30, 2004. For the year ended

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December 31, 2003, royalty and product revenues from Quadramet and sales revenues from ProstaScint accounted for approximately 35% and 60%, respectively, of our product related revenues. For the year ended December 31, 2002, royalties from Quadramet and product revenues from ProstaScint accounted for approximately 15% and 64%, respectively, of our product related revenues. If ProstaScint or Quadramet does not achieve broader market acceptance, either because we fail to effectively market such products or our competitors introduce competing products, we may not be able to generate sufficient revenue to become profitable.

WE DEPEND ON ACCEPTANCE OF OUR PRODUCTS BY THE MEDICAL COMMUNITY FOR THE CONTINUATION OF OUR REVENUES.

Our business, financial condition and results of operations depend on the acceptance of our marketed products as safe, effective and cost-efficient alternatives to other available treatment and diagnostic protocols by the medical community, including:

- o health care providers, such as hospitals and physicians; and
- o third-party payors, including Medicare, Medicaid, private insurance

carriers and health maintenance organizations.

With respect to ProstaScint, our customers, including technologists and physicians, must successfully complete our Partners in Excellence Program, a proprietary training program designed to promote the correct acquisition and interpretation of ProstaScint images. This product is technique-dependent and requires a learning commitment by technologists and physicians and their acceptance of this product as part of their treatment practices. With respect to Ouadramet, we believe that challenges we may encounter in generating market acceptance for this product include the need to further educate patients and physicians about Quadramet's properties, approved uses and how Quadramet may be differentiated from other radiopharmaceuticals and used in combination with other treatments for the palliation of pain due to metastatic bone disease, such as analgesics, opioids, bisphosphonates, and chemotherapeutics. If we are unable to educate our existing and future customers about ProstaScint and Quadramet, our revenues may decrease. If ProstaScint or Quadramet do not achieve broader market acceptance, we may not be able to generate sufficient revenue to become profitable.

Generating market acceptance and sales of our products has proven difficult, time consuming and uncertain. We launched OncoScint CR/OV in December 1992, ProstaScint in October 1996, Quadramet in March 1997, a brachytherapy product in February 2001 and NMP22 BladderChek in November 2002. Revenues for ProstaScint grew from \$55,000 in 1996 to \$6.5 million in 2003. Royalties from sales and product revenues for Quadramet grew from \$3.3 million in 1997 to \$3.9 million in 2003. Royalties from sales of Quadramet in the initial years of sales were supported by a guaranteed minimum revenue arrangement with the third party licensor of Quadramet. OncoScint CR/OV selling activity was discontinued in December 2002 and selling activities for the brachytherapy products were discontinued in January 2003. We began marketing NMP22 BladderChek in November 2002. Sales of NMP22 BladderChek have been minimal to date and we do not expect significant revenues from sales of NMP22 BladderChek. Currently, substantially all of our revenues are derived from sales of ProstaScint and Quadramet.

WE RELY HEAVILY ON OUR COLLABORATIVE PARTNERS.

Our success depends largely upon the success and financial stability of our collaborative partners. We have entered into the following agreements for the development, sale, marketing, distribution and manufacture of our products, product candidates and technologies:

o a license agreement with The Dow Chemical Company relating to the Quadramet technology;

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- o a manufacturing and supply agreement for the manufacture of Quadramet with Bristol-Myers Squibb Medical Imaging, Inc.;
- o a manufacturing agreement for the manufacture of ProstaScint with Laureate Pharma, L.P.;
- o marketing, license and supply agreements with Advanced Magnetics, Inc. related to Combidex;
- o a distribution services agreement with Specialty Pharmaceutical Services for ProstaScint;
- o various agreements which form and control our joint venture with Progenics Pharmaceuticals, Inc. for the development of PSMA for in vivo immunotherapy

for prostate and other cancers; and

o a license agreement between our joint venture and AlphaVax Human Vaccines, Inc.

Because our collaborative partners are responsible for certain manufacturing and distribution activities, among others, these activities are outside our direct control and we rely on our partners to perform their obligations. In the event that our collaborative partners are entitled to enter into third party arrangements that may economically disadvantage us, or do not perform their obligations as expected under our agreements, our products may not be commercially successful. As a result, any success may be delayed and new product development could be inhibited with the result that our business, financial condition and results of operation could be significantly and adversely affected.

OUR BUSINESS COULD BE HARMED IF CERTAIN AGREEMENTS EXPIRE OR ARE TERMINATED.

If our collaborative agreements expire or are terminated and we cannot renew or replace them on commercially reasonable terms, our business and financial results may suffer. If the licenses and/or agreements described below expire or are terminated, we may not be able to find suitable alternatives to them on a timely basis or on reasonable terms, if at all. The loss of the right to use these technologies that we have licensed or the loss of any services provided to us under these agreements would significantly and adversely affect our business, financial condition and results of operations. For example, in January 2003, we provided Draximage Inc. with notice of our intent to terminate our product manufacturing and supply agreement and license agreement with Draximage relating to the brachytherapy products which represented 20% of our product-related revenues for the year ended December 31, 2002. In April 2003, we entered into an agreement with Draximage formally terminating each of these agreements. We no longer market and sell the brachytherapy products.

We currently depend on the following agreements for our present and future operating results:

DOW CHEMICAL. In May 1993, we obtained an exclusive license from The Dow Chemical Company to North American rights to use Quadramet as a therapeutic radiopharmaceutical for metabolic bone disease or tumor regression for cancer caused by metastatic or primary cancer in bone in humans, and for the treatment of disease characterized by osteoblastic response in humans. Our license was expanded to include Latin America in 1995.

Our license agreement with Dow with respect to Quadramet shall remain in effect, unless earlier terminated pursuant to the terms thereof, for a term of twenty (20) years from May 30, 1993 or until the last to expire of the related patents. We anticipate such termination date to be May 30, 2013.

BRISTOL-MYERS SQUIBB MEDICAL IMAGING, INC. Quadramet is manufactured by BMSMI pursuant to the terms of a manufacturing and supply agreement with us effective as of January 1, 2004. Under this agreement, BMSMI has agreed to manufacture, supply and distribute Quadramet for us in exchange for a

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minimum payment of at least \$4.2 million annually through 2008. The agreement shall thereafter renew for five successive one-year periods unless terminated by either party upon two years notice, or earlier terminated pursuant to the terms thereof. The agreement is terminable by either party, at any time, upon two years notice to the other. We also pay BMSMI a variable amount per month for

each order placed to cover the cost of customer service and distribution.

AGREEMENT WITH DR. HOROSZEWICZ REGARDING PROSTASCINT. In 1989, we entered into an agreement with Dr. Julius S. Horoszewicz pursuant to which we assigned certain rights to the patent claiming the 7E11-C5 antibody, as well as additional patents relating to the ProstaScint product and commercialization rights thereto. Under our agreement, which will remain in effect until the expiration of the last related patent, we have made, and may continue to make, certain payments to Dr. Horoszewicz.

LAUREATE PHARMA, L.P. In January 2003, we entered into a contract manufacturing agreement with Laureate Pharma, L.P., pursuant to which Laureate was obligated to manufacture ProstaScint for us through December 31, 2003. In September 2004, we entered into another agreement with Laureate pursuant to which Laureate is manufacturing additional quantities of ProstaScint for us in exchange for expected payments of at least an aggregate of \$5.1 million through 2006. This agreement was effective immediately upon execution and shall terminate, unless earlier terminated pursuant to the terms thereof, upon Laureate's completion of the production campaign and shipment of the resulting products from Laureate's facility in Princeton, NJ. We believe that this agreement will provide us with a sufficient supply of ProstaScint to satisfy our commercial requirements for approximately the next four years based upon current sales levels. In October 2004, Laureate entered into a definitive agreement with Safeguard Scientifics, Inc. pursuant to which it is intended that Safeguard will acquire Laureate's business and assets. Following the transaction, which is expected to be consummated in the fourth quarter of 2004, Laureate is expected to continue to operate as a full service contract manufacturing organization. We do not anticipate that we will experience any disruption in Laureate's performance of its obligations to produce ProstaScint.

ADVANCED MAGNETICS, INC. In August, 2000, we expanded our product pipeline by entering into marketing, license and supply agreements with Advanced Magnetics, Inc. for Combidex. We have exclusive United States marketing rights to Combidex for all indications. Combidex (ferumoxtran-10) is an investigational molecular imaging agent consisting of iron oxide nanoparticles, which is currently being developed for use in conjunction with magnetic resonance imaging to aid in the differentiation of cancerous and non-cancerous lymph nodes, and is currently under review by the U.S. Food and Drug Administration. In September 2004, Advanced Magnetics submitted a complete response to an approvable letter received in June 2000 from the FDA for Combidex. The complete response was accepted by the FDA and was assigned a user fee goal date of March 30, 2005. Our license and marketing agreement with Advanced Magnetics will continue until August 25, 2010, and shall thereafter automatically renew for successive five year periods, unless notice of non-renewal or termination is given by us or Advanced Magnetics, 90 days prior to the commencement of any renewal period.

SLOAN KETTERING INSTITUTE FOR CANCER RESEARCH. In 1993, we began a development program with SKICR involving PSMA and our proprietary monoclonal antibody. In November 1996, we exercised an option for, and obtained, an exclusive worldwide license from the SKICR to its PSMA-related technology. The term of the license shall end on the date of expiration of the last to expire of the licensed patents unless it earlier terminates by operation of law or by acts of the parties in accordance with the terms of the agreement.

OUR INTELLECTUAL PROPERTY IS DIFFICULT TO PROTECT.

In addition to our key agreements referenced above, our business and competitive positions are also dependent upon our ability to protect our proprietary technology. Because of the substantial length of

time and expense associated with the development of new products, we, like the rest of the biopharmaceutical industry, place considerable importance on obtaining and maintaining patent and trade secret protection for new technologies, products and processes. We have filed patent applications for certain aspects of our technology for diagnostic and therapeutic products and/or the methods for their production and use.

In addition, the protection afforded by a duly issued patent is limited in duration. With respect to our ProstaScint product, we rely or have relied primarily on United States patent numbers 5,162,504 (expiring October 28, 2010), 4,741,900 (expired June 9, 2004), 4,671,958 (expired June 9, 2004), and 4,867,973 (expired June 9, 2004). With respect to Quadramet, we rely primarily on United States patent numbers 4,898,724 (expiring March 28, 2011), 4,937,333 (expiring August 4, 2009), 4,897,254 (expiring January 30, 2007), 5,066,478 (expiring November 19, 2008), and 5,300,279 (expiring November 19, 2008), which were licensed to us by The Dow Chemical Company. In addition, we rely on United States patent number 5,495,042 (expiring November 4, 2013), which is assigned to us, and United States patent numbers 5,714,604 (expiring February 3, 2015) and 5,762,907 (expiring November 21, 2006).

The patent positions of pharmaceutical, biopharmaceutical and biotechnology companies, including us, are generally uncertain and involve complex legal and factual questions. Our patents and patent applications may not protect our technologies and products because, among other things:

- o there is no guarantee that any of our pending patent applications will result in issued patents;
- o we may develop additional proprietary technologies that are not patentable;
- o there is no guarantee that any patents issued to us, our collaborators or our licensors will provide a basis for a commercially viable product;
- o there is no guarantee that any patents issued to us or our collaborators will provide us with any competitive advantage;
- o there is no guarantee that any patents issued to us or our collaborators will not be challenged, circumvented or invalidated by third parties; and
- o there is no guarantee that any patents previously issued to others or issued in the future will not have an adverse effect on our ability to do business.

In addition, patent law in the technology fields in which we operate is uncertain and still evolving. The degree of protection that may be afforded by any patents we are issued or license from others may not be sufficient to protect our commercial interests. Furthermore, others may independently develop similar or alternative technologies, duplicate our technologies, or, if patents are issued to us, design around the patented technologies developed by us. We could incur substantial costs in litigation if we are required to defend ourselves in patent suits by third parties or if we initiate such suits. In addition, if challenged by others in litigation, the patents we have been issued, which we have been assigned or we have licensed from others may be found invalid. It is also possible that our activities may infringe patents owned by others. Defense and prosecution of patent matters can be expensive and time-consuming and, regardless of whether the outcome is favorable to us, can result in the diversion of substantial financial, managerial and other resources. An adverse outcome could:

o subject us to significant liability to third parties;

o require us to cease any related research and development activities and product sales; or

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o require us to obtain licenses from third parties.

Any licenses required under any such third-party patents or proprietary rights may not be available on commercially reasonable terms, if at all. Moreover, the laws of certain countries may not protect our proprietary rights to the same extent as the laws of the United States. We cannot predict whether our or our competitors' pending patent applications will result in the issuance of valid patents which may significantly and adversely affect our business, financial condition and results of operations.

THERE ARE RISKS ASSOCIATED WITH THE MANUFACTURE AND SUPPLY OF OUR PRODUCTS.

If we are to be successful, our products will have to be manufactured by contract manufacturers in compliance with regulatory requirements and at costs acceptable to us. If we are unable to successfully arrange for the manufacture of our products and product candidates, either because potential manufacturers are not cGMP compliant, are not available or charge excessive amounts, we will not be able to successfully commercialize our products and our business, financial condition and results of operations will be significantly and adversely affected.

ProstaScint is currently manufactured at a current Good Manufacturing Practices, or cGMP, compliant manufacturing facility operated by Laureate Pharma, L.P. We entered into a development and manufacturing agreement with DSM Biologics Company B.V. in July 2000, which we intended would replace an earlier arrangement we had with Laureate with respect to ProstaScint. Our relationship with DSM was subsequently terminated. Although we entered into another agreement with Laureate in September 2004 pursuant to which Laureate is manufacturing additional quantities of ProstaScint for us, our failure to maintain a long term supply agreement on commercially reasonable terms will have a material adverse effect on our business, financial condition and results of operations. In October 2004, Laureate entered into a definitive agreement with Safeguard Scientifics, Inc. pursuant to which it is intended that Safeguard will acquire Laureate's business and assets. Following the transaction, which is expected to be consummated in the fourth quarter of 2004, Laureate is expected to continue to operate as a full service contract manufacturing organization. We do not anticipate that we will experience any disruption in Laureate's performance of its obligations to produce ProstaScint.

Quadramet is manufactured by BMSMI, pursuant to an agreement with us. Both primary components of Quadramet, particularly Samarium-153 and EDTMP, are provided to BMSMI by outside suppliers. Due to radioactive decay, Samarium-153 must be produced on a weekly basis. BMSMI obtains its requirements for Samarium-153 from a sole supplier and EDTMP from another sole supplier. Alternative sources for these components may not be readily available, and any alternative supplier would have to be identified and qualified, subject to all applicable regulatory guidelines. If BMSMI cannot obtain sufficient quantities of the components on commercially reasonable terms, or in a timely manner, it would be unable to manufacture Quadramet on a timely and cost-effective basis, which would have a material adverse effect on our business, financial condition and results of operations.

The Company, our contract manufacturers and testing laboratories are required to adhere to FDA regulations setting forth requirements for cGMP, and

similar regulations in other countries, which include extensive testing, control and documentation requirements. Ongoing compliance with cGMP, labeling and other applicable regulatory requirements is monitored through periodic inspections and market surveillance by state and federal agencies, including the FDA, and by comparable agencies in other countries. Failure of our contract vendors or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of the government to grant pre-market clearance or pre-market approval of drugs, delays, suspension or withdrawal of approvals, seizures or recalls of products, operating restrictions and criminal prosecutions any of which could significantly and adversely affect our business, financial condition and results of operations.

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OUR PRODUCTS, GENERALLY, ARE IN THE EARLY STAGES OF DEVELOPMENT AND COMMERCIALIZATION AND WE MAY NEVER ACHIEVE THE REVENUE GOALS SET FORTH IN OUR BUSINESS PLAN.

We began operations in 1980 and have since been engaged primarily in research directed toward the development, commercialization and marketing of products to improve the diagnosis and treatment of cancer and other diseases. In October 1996, we introduced for commercial use our ProstaScint imaging agent. In March 1997, we introduced for commercial use our Quadramet therapeutic product. In November 2002, we began promoting NMP22 BladderChek to urologists in the United States, and now have the right to promote NMP22 BladderChek solely to oncologists. Sales of NMP22 BladderChek have been minimal to date, and we do not expect significant revenues from sales of NMP22 BladderChek.

In August 2000, we expanded our product pipeline by entering into marketing, license and supply agreements with Advanced Magnetics, Inc. for Combidex. We have exclusive United States marketing rights to Combidex for all indications. In September 2004, Advanced Magnetics submitted a complete response to an approvable letter received in June 2000 from the FDA for Combidex. The complete response was accepted by the FDA and was assigned a user fee goal date of March 30, 2005.

To date, we have allocated, and expect to continue to allocate, significant amounts of time and resources in preparation for the commercial launch of Combidex. We cannot assure you, however, that Advanced Magnetics will obtain approval from the FDA for Combidex on a timely basis, if at all. If Advanced Magnetics does not secure regulatory approval for Combidex, we will not be permitted to sell and market Combidex as we have anticipated and we will not realize any return on the significant amount of time and resources we have allocated to Combidex.

Our PSMA technologies are still in the early stages of development. In July 2004, as part of our continuing efforts to reduce non-strategic expenses, we initiated the closure of facilities at our AxCell BioSciences subsidiary. Research projects through academic, governmental and corporate collaborators will continue to be supported and additional applications for the intellectual property and technology at AxCell are being pursued. We may be unable to further develop or commercialize any of these products and technologies in the future.

Our business is therefore subject to the risks inherent in an early-stage biopharmaceutical business enterprise, such as the need:

- o to obtain sufficient capital to support the expenses of developing our technology and commercializing our products;
- o to ensure that our products are safe and effective;

- o to obtain regulatory approval for the use and sale of our products;
- o to manufacture our products in sufficient quantities and at a reasonable cost;
- o to develop a sufficient market for our products; and
- o to attract and retain qualified management, sales, technical and scientific staff.

The problems frequently encountered using new technologies and operating in a competitive environment also may affect our business, financial condition and results of operations. If we fail to properly address these risks and attain our business objectives, our business could be significantly and adversely affected.

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ALL OF OUR POTENTIAL ONCOLOGY PRODUCTS WILL BE SUBJECT TO THE RISKS OF FAILURE INHERENT IN THE DEVELOPMENT OF DIAGNOSTIC OR THERAPEUTIC PRODUCTS BASED ON NEW TECHNOLOGIES.

Product development for cancer treatment involves a high degree of risk. The product candidates we develop, pursue or offer may not prove to be safe and effective, may not receive the necessary regulatory approvals, may be precluded by proprietary rights of third parties or may not ultimately achieve market acceptance. These product candidates will require substantial additional investment, laboratory development, clinical testing and regulatory approvals prior to their commercialization. We may experience difficulties, such as the inability to initiate clinical trials or receive timely regulatory approvals, that could delay or prevent the successful development, introduction and marketing of new products.

Before we obtain regulatory approvals for the commercial sale of any of our products under development, we must demonstrate through preclinical studies and clinical trials that the product is safe and effective for use in each target indication. The results from preclinical studies and early-stage clinical trials may not be predictive of results that will be obtained in large-scale, later-stage testing. Our clinical trials may not demonstrate safety and efficacy of a proposed product, $\,$ and therefore, $\,$ may not result in marketable products. A number of companies in our industry have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. Clinical trials or marketing of any potential diagnostic or therapeutic products may expose us to liability claims for the use of these diagnostic or therapeutic products. We may not be able to maintain product liability insurance or sufficient coverage may not be available at a reasonable cost. In addition, internal development of diagnostic or therapeutic products will require significant investments in product development, marketing, sales and regulatory compliance resources. We will also have to establish or contract for the manufacture of products, including supplies of drugs used in clinical trials, under the cGMP of the FDA. We cannot assure you that product issues will not arise following successful clinical trials and FDA approval.

The rate of completion of clinical trials also depends on the rate of patient enrollment. Patient enrollment depends on many factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites and the eligibility criteria for the study. Delays in planned patient enrollment may result in increased costs and delays, which could have a harmful effect on our ability to develop the products in our pipeline. If we are unable to develop and commercialize products on a timely basis or at all,

our business, financial condition and results of operations could be significantly and adversely affected.

COMPETITION IN OUR FIELD IS INTENSE AND LIKELY TO INCREASE.

All of our products and product candidates are subject to significant competition from organizations that are pursuing technologies and products that are the same as or similar to our technology and products. Many of the organizations competing with us have greater capital resources, research and development staffs and facilities and marketing capabilities.

We face, and will continue to face, intense competition from one or more of the following entities:

- o pharmaceutical companies;
- o biotechnology companies;
- o diagnostic companies;
- o medical device companies;

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- o radiopharmaceutical distributors;
- o academic and research institutions; and
- o government agencies.

The markets in which our products compete are large. Our most significant competitors include various pharmaceutical and medical device companies, radiopharmaceutical distributors and biotechnology companies.

Quadramet primarily competes with Strontium-89 chloride in the radiopharmaceutical pain palliation market. Strontium-89 chloride is manufactured and marketed either as Metastron, by Amersham Health, or in a generic form by Bio-Nucleonics Pharma, Inc. Amersham manufactures Metastron and sells the product through its wholly-owned network of radiopharmacies, direct to end-users and through other radiopharmacy distributors. The generic version is distributed directly by the manufacturer or is sold through radiopharmacy distributors such as Cardinal Health and Custom Care Pharmacy. The first radiopharmaceutical introduced as a metastatic bone cancer pain palliation agent, Phosphorus-32 (P-32), is no longer routinely utilized clinically in the United States.

Competitive imaging modalities to ProstaScint include computed tomography (CT), magnetic resonance (MR) imaging, and position emission tomography (PET).

Polymedco manufactures BTAStat, a point of care urine-based test approved for monitoring bladder cancer patients. BTAStat, marketed by Mentor, competes with NMP22 BladderChek (a product of Matritech for which we are the sole distributor to oncologists in the United States through December 31, 2004). NMP22 BladderChek is, however, the only point of care urine-based test approved for both monitoring and diagnosis of bladder cancer. Matritech has retained rights to market NMP22 BladderChek directly to physicians other than oncologists, such as primary care physicians.

Additionally, we face competition in the development of PSMA-related technology and products primarily from Millennium Pharmaceuticals, Inc. and

Medarex, Inc.

Before we recover development expenses for our products and technologies, the products or technologies may become obsolete as a result of technological developments by others or us. Our products could also be made obsolete by new technologies, which are less expensive or more effective. We may not be able to make the enhancements to our technology necessary to compete successfully with newly emerging technologies and failure to do so could significantly and adversely affect our business, financial condition and results of operations.

WE HAVE LIMITED SALES, MARKETING AND DISTRIBUTION CAPABILITIES FOR OUR PRODUCTS.

We have established an internal sales force that is responsible for marketing and selling ProstaScint, Quadramet and NMP22 BladderChek. Although we are expanding our sales force, it still has limited sales, marketing and distribution capabilities compared to those of many of our competitors. Effective August 1, 2003, we reacquired marketing rights to Quadramet from Berlex Laboratories, Inc. in North and Latin America, for an upfront payment of \$8.0 million and the obligation to pay royalties to Berlex on future sales of Quadramet. If our internal sales force is unable to successfully market Quadramet and ProstaScint, our business and financial condition would be adversely affected. If we are unable to establish and maintain significant sales, marketing and distribution efforts within the United States, either internally or through arrangements with third parties, our business may be significantly and adversely affected. In locations outside of the United States, we have not established a selling presence. To the extent that our sales force, from time to time, markets and sells additional products, we cannot be certain that adequate resources or sales capacity will be available to effectively accomplish these tasks.

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FAILURE OF THIRD PARTY PAYORS TO PROVIDE ADEQUATE COVERAGE AND REIMBURSEMENT FOR OUR PRODUCTS COULD LIMIT MARKET ACCEPTANCE AND AFFECT PRICING OF OUR PRODUCTS AND AFFECT OUR REVENUES.

Sales of our products depend in part on the availability of favorable coverage and reimbursement by governmental healthcare programs such as Medicare and Medicaid as well as private health insurance plans. Each payor has its own process and standards for determining whether and, if so, to what extent it will cover and reimburse a particular product or service. Whether and to what extent a product may be deemed covered by a particular payor depends upon a number of factors, including the payor's determination that the product is reasonable and necessary for the diagnosis or treatment of the illness or injury for which it is administered according to accepted standards of medical practice, cost effective, not experimental or investigational, not found by the FDA to be less than effective, and not otherwise excluded from coverage by law, regulation, or contract. There may be significant delays in obtaining coverage for newly-approved products, and coverage may not be available or could be more limited than the purposes for which the product is approved by the FDA.

Moreover, eligibility for coverage does not imply that any product will be reimbursed in all cases or at a rate that allows us to make a profit or even cover our costs, which include, for example, research, development, production, sales, and distribution costs. Interim payments for new products, if applicable, also may not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower-cost products that are already reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary

constraints and/or imperfections in Medicare or Medicaid data. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs, or other payors, or by any future relaxation of laws that restrict imports of certain medical products from countries where they may be sold at lower prices than in the United States.

Third party payors often follow Medicare coverage policy and payment limitations in setting their own coverage policies and reimbursement rates, and may have sufficient market power to demand significant price reductions. Even if successful, securing coverage at adequate reimbursement rates from government and third party payors can be a time consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products among other data and materials to each payor. Our inability to promptly obtain favorable coverage and profitable reimbursement rates from government-funded and private payors for our products could have a material adverse effect on our business, financial condition and results of operations, and our ability to raise capital needed to commercialize products.

Our business, financial condition and results of operations will continue to be affected by the efforts of governmental and third-party payors to contain or reduce the costs of healthcare. There have been, and we expect that there will continue to be, a number of federal and state proposals to regulate expenditures for medical products and services, which may affect payments for therapeutic and diagnostic imaging agents such as our products. In addition, an emphasis on managed care increases possible pressure on the pricing of these products. While we cannot predict whether these legislative or regulatory proposals will be adopted, or the effects these proposals or managed care efforts may have on our business, the announcement of these proposals and the adoption of these proposals or efforts could affect our stock price or our business. Further, to the extent these proposals or efforts have an adverse effect on other companies that are our prospective corporate partners, our ability to establish necessary strategic alliances may be harmed.

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IF WE ARE UNABLE TO COMPLY WITH APPLICABLE GOVERNMENTAL REGULATION WE MAY NOT BE ABLE TO CONTINUE OUR OPERATIONS.

Any products tested, manufactured or distributed by us or on our behalf pursuant to FDA approvals are subject to pervasive and continuing regulation by numerous regulatory authorities, including primarily the FDA. We may be slow to adapt, or we may never adapt to changes in existing requirements or adoption of new requirements or policies. Our failure to comply with regulatory requirements could subject us to enforcement action, including product seizures, recalls, withdrawal, suspension, or revocation of approvals, restrictions on or injunctions against marketing our products based on our technology, and civil and criminal penalties. We may incur significant costs to comply with laws and regulations in the future or compliance with laws or regulations may create an unsustainable burden on our business.

Numerous federal, state and local governmental authorities, principally the FDA, and similar regulatory agencies in other countries, regulate the preclinical testing, clinical trials, manufacture and promotion of any compounds or agents we or our collaborative partners develop, and the manufacturing and marketing of any resulting drugs. The product development and regulatory approval process is lengthy, expensive, uncertain and subject to delays.

The regulatory risks we face also include the following:

o any compound or agent, including generics, we or our collaborative partners

develop must receive regulatory agency approval before it may be marketed as a drug in a particular country;

- o the regulatory process, which includes preclinical testing and clinical trials of each compound or agent in order to establish its safety and efficacy, varies from country to country, can take many years and requires the expenditure of substantial resources;
- o in all circumstances, approval of the use of previously unapproved radioisotopes in certain of our products requires approval of the Nuclear Regulatory Commission and/or equivalent state regulatory agencies, which may be a lengthy process. A radioisotope is an unstable form of an element which undergoes radioactive decay, thereby emitting radiation which may be used, for example, to image or destroy harmful growths or tissue;
- o data obtained from preclinical and clinical activities are susceptible to varying interpretations which could delay, limit or prevent regulatory agency approval; and
- o delays or rejections may be encountered based upon changes in regulatory agency policy during the period of product development and/or the period of review of any application for regulatory agency approval. These delays could adversely affect the marketing of any products we or our collaborative partners develop, impose costly procedures upon our activities, diminish any competitive advantages we or our collaborative partners may attain and adversely affect our ability to receive royalties.

Regulatory agency approval for a product or agent may not be received and may entail limitations on the indicated uses that could limit the potential market for any such product. For example, as disclosed in our press releases and periodic filings, we have exclusive United States marketing rights to Combidex, an investigational molecular imaging agent consisting of iron oxide nanoparticles, which is currently being developed for use in conjunction with magnetic resonance imaging to aid in the differentiation of cancerous and non-cancerous lymph nodes, and is under review by the FDA. In June 2000, Advanced Magnetics received an approvable letter from the FDA with respect to Combidex. An approvable letter is a written communication to an applicant from the FDA stating that the agency will approve the

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application or abbreviated application if specific and satisfactory additional information or material is submitted or specific conditions are met. An approvable letter does not constitute approval of any part of an application or abbreviated application and does not permit marketing of the drug that is the subject of the application or abbreviated application. In September 2004, we announced that Advanced Magnetics submitted a complete response to the approvable letter for Combidex. The September 30, 2004 submission was accepted and assigned a user fee goal date of March 30, 2005.

If and when we obtain approval or clearance for our products, the marketing, manufacture, labeling, packaging, adverse event and other reporting, storage, advertising and promotion and record keeping related to our products would remain subject to extensive regulatory requirements. Discovery of previously unknown problems with a drug, its manufacture or its manufacturer may result in restrictions on such drug, manufacture or manufacturer, including withdrawal of the drug from the market.

The Food, Drug and Cosmetics Act and the Public Health Service Act require: (i) that our products be manufactured in FDA registered facilities subject to inspection; and (ii) that we comply with cGMP, which imposes certain procedural

and documentation requirements upon us and our manufacturing partners with respect to manufacturing and quality assurance activities. If we or our contract partners do not comply with cGMP or we do not comply with any of the FDA's other postmarket requirements we may be subject to sanctions, including fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, product recalls, failure of the government to grant clearance or premarket approval for devices or premarket approval for drugs or biologics, suspension, revocation or withdrawal of marketing approvals and criminal prosecution.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted, or FDA regulations, guidance or interpretations changed, or what the impact of such changes, if any, may be.

WE DEPEND ON ATTRACTING AND RETAINING KEY PERSONNEL.

We are highly dependent on the principal members of our management and scientific staff. The loss of their services might significantly delay or prevent the achievement of development or strategic objectives. Our success depends on our ability to retain key employees and to attract additional qualified employees. Competition for personnel is intense, and therefore we may not be able to retain existing personnel or attract and retain additional highly qualified employees in the future.

On December 17, 2002, we entered into a letter agreement with Michael D. Becker in connection with Mr. Becker's promotion to President and Chief Executive Officer of the Company. Under the terms of such letter agreement, Mr. Becker receives an annual base salary of \$280,000. Mr. Becker is also eligible to participate in our Cytogen Corporation Performance Bonus Plan, as and if approved by our Board of Directors, with a target bonus rate of 35% of base salary based upon performance objectives. Mr. Becker is also entitled to all existing Company benefits, at the sole discretion of the Board of Directors. In addition, Mr. Becker was granted options to purchase 200,000 shares of our common stock under our 1995 Stock Option Plan. Pursuant to the terms of the letter agreement, in the event we terminate Mr. Becker's employment for reasons other than for cause, as defined therein, Mr. Becker shall be entitled to receive twelve months' base pay and continuation of benefits under COBRA, and a pro rata portion of any incentive benefits earned through the date of termination.

We do not carry key person life insurance policies and we do not typically enter into long-term arrangements with our key personnel. If we are unable to hire and retain personnel in key positions, our

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business, financial condition and results of operations could be significantly and adversely affected unless qualified replacements can be found.

OUR BUSINESS EXPOSES US TO PRODUCT LIABILITY CLAIMS THAT MAY EXCEED OUR FINANCIAL RESOURCES, INCLUDING OUR INSURANCE COVERAGE, AND MAY LEAD TO THE CURTAILMENT OR TERMINATION OF OUR OPERATIONS.

Our business is subject to product liability risks inherent in the testing, manufacturing and marketing of our products and product liability claims may be asserted against us, our collaborators or our licensees. While we currently

maintain product liability insurance in the amount of \$10.0 million, such coverage may not be adequate to protect us against future product liability claims. In addition, product liability insurance may not be available to us in the future on commercially reasonable terms, if at all. Although we have not had a history of claims payments that have exceeded our insurance coverage or available financial resources, if liability claims against us exceed our financial resources or coverage amounts, we may have to curtail or terminate our operations. In addition, while we currently maintain directors and officers liability insurance in the amount of \$25.0 million, such coverage may not be available on commercially reasonable terms or be adequate to cover any claims that we may be required to satisfy in the future. Our insurance coverage is subject to industry standard and certain other limitations.

OUR SECURITY MEASURES MAY NOT PROTECT OUR UNPATENTED PROPRIETARY TECHNOLOGY.

We also rely upon trade secret protection for some of our confidential and proprietary information that is not subject matter for which patent protection is available. To help protect our rights, we require all employees, consultants, advisors and collaborators to enter into confidentiality agreements that require disclosure, and in most cases, assignment to us, of their ideas, developments, discoveries and inventions, and that prohibit the disclosure of confidential information to anyone outside Cytogen or our subsidiaries. Although we are unaware of any unauthorized use or disclosure of our unpatented proprietary technology to date, these agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information or prevent such unauthorized use or disclosure.

WE MAY NOT BE ABLE TO IMPLEMENT AXCELL'S BUSINESS PLAN.

In September 2002, we began the restructuring of our subsidiary, AxCell BioSciences Corporation, in an effort to reduce expenses and position Cytogen for stronger long-term growth in oncology. In July 2004, as part of our continuing efforts to reduce non-strategic expenses, we initiated the closure of facilities at our AxCell BioSciences subsidiary. Research projects through academic, governmental and corporate collaborators will continue to be supported and additional applications for the intellectual property and technology at AxCell are being pursued. We may be unable to further develop or commercialize any of Axcell's technologies in the future.

WE MAY NEED TO RAISE ADDITIONAL CAPITAL, WHICH MAY NOT BE AVAILABLE.

Our cash, cash equivalents and short-term investments were \$40.5 million at September 30, 2004. We expect that our existing capital resources should be adequate to fund our operations and commitments into 2007.

We have incurred negative cash flows from operations since our inception and have expended, and expect to continue to expend in the future, substantial funds based upon the:

- o success of our product commercialization efforts;
- o success of any future acquisitions of complementary products and technologies we may make;

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- o magnitude, scope and results of our product development and research and development efforts;
- o progress of preclinical studies and clinical trials;

- o progress toward regulatory approval for our products;
- o costs of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- o competing technological and market developments; and
- o expansion of strategic alliances for the sale, marketing and distribution of our products.

Our business or operations may change in a manner that would consume available resources more rapidly than anticipated. We expect that we will have additional requirements for debt or equity capital, irrespective of whether and when we reach profitability, for further product development costs, product and technology acquisition costs and working capital. To the extent that our currently available funds and revenues are insufficient to meet current or planned operating requirements, we will be required to obtain additional funds through equity or debt financing, strategic alliances with corporate partners and others, or through other sources. These financial sources may not be available when we need them or they may be available, but on terms that are not commercially acceptable to us. If adequate funds are not available, we may be required to delay, further scale back or eliminate certain aspects of our operations or attempt to obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies, product candidates, products or potential markets. If adequate funds are not available, our business, financial condition and results of operations will be materially and adversely affected.

OUR CAPITAL RAISING EFFORTS MAY DILUTE STOCKHOLDER INTERESTS.

If we raise additional capital by issuing equity securities or convertible debentures, including the securities registered pursuant to this prospectus, such issuance will result in ownership dilution to our existing stockholders, and new investors could have rights superior to those of our existing stockholders. The extent of such dilution will vary based upon the amount of capital raised.

WE MAY NEED TO RAISE FUNDS OTHER THAN THROUGH THE ISSUANCE OF EQUITY SECURITIES.

If we raise additional funds through collaborations and licensing arrangements, we may be required to relinquish rights to certain of our technologies or product candidates or to grant licenses on unfavorable terms. If we relinquish rights or grant licenses on unfavorable terms, we may not be able to develop or market products in a manner that is profitable to us.

OUR PSMA PRODUCT DEVELOPMENT PROGRAM IS NOVEL AND, CONSEQUENTLY, INHERENTLY RISKY.

We are subject to the risks of failure inherent in the development of product candidates based on new technologies, including our PSMA technology. These risks include the possibility that:

- o the technologies we use will not be effective;
- o our product candidates will be unsafe;
- o our product candidates will fail to receive the necessary regulatory approvals;

- o the product candidates will be hard to manufacture on a large scale or will be uneconomical to market; and
- o we will not successfully overcome technological challenges presented by our potential new products.

Our other research and development programs involve similarly novel approaches to human therapeutics. Consequently, there is no precedent for the successful commercialization of therapeutic products based on our PSMA technologies. If we fail to develop such products, our business financial condition and results of operations could be significantly and adversely affected.

WE COULD BE NEGATIVELY IMPACTED BY FUTURE INTERPRETATION OR IMPLEMENTATION OF FEDERAL AND STATE FRAUD AND ABUSE LAWS, INCLUDING ANTI-KICKBACK LAWS AND FEDERAL AND STATE FALSE CLAIMS STATUTES.

We are subject to various federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback laws and false claims laws, among others. Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, imprisonment and exclusion from participation in federal and state healthcare programs, including Medicare, Medicaid, and veterans' health programs, among others.

The federal and state governments have significantly increased the financial resources allocated to enforcing healthcare fraud and abuse laws. Private insurers and various state enforcement agencies also have increased their level of scrutiny of healthcare claims and arrangements in an effort to identify and prosecute fraudulent and abusive practices in the healthcare industry.

We have not been challenged by a governmental authority under any of these laws and believe that our operations are in compliance with such laws. However, because of the far-reaching nature of these laws, we may be required to alter one or more of our practices to be in compliance with these laws. Healthcare fraud and abuse laws and regulations are complex, and even minor, inadvertent irregularities can potentially give rise to claims that the law has been violated. Any violations of these laws could result in a material adverse effect on our business, financial condition and results of operations. If there is a change in law, regulation or administrative or judicial interpretations, we may have to change our business practices or our existing business practices could be challenged as unlawful, which could have a material adverse effect on our business, financial condition and results of operations.

The healthcare fraud and abuse laws to which we are subject include the following, among others:

FEDERAL AND STATE ANTI-KICKBACK LAWS AND SAFE HARBOR PROVISIONS. The federal anti-kickback law makes it a felony to knowingly and willfully offer, or pay remuneration "to induce" a person to refer an individual or to recommend or arrange for the purchase, lease or ordering of any item or service for which payment may be made under the Medicare or state healthcare programs. The anti-kickback prohibitions apply regardless of whether the remuneration is provided directly or indirectly, in cash or in kind. Interpretations of the law have been very broad. Under current law, courts and federal regulatory authorities have stated that this law is violated if even one purpose, as opposed to the sole or primary purpose, of the arrangement is to induce referrals. Violations of the anti-kickback law carry potentially severe penalties including imprisonment of up to five years, criminal fines, civil money penalties and exclusion from the Medicare and Medicaid programs.

The U.S. Department of Health and Human Services Office of Inspector General, or OIG, has published "safe harbors" that exempt some arrangements from enforcement action under the anti-kickback statute. These statutory and regulatory safe harbors protect various bona fide employment relationships, personal service arrangements, certain discount arrangements, among other things, provided

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that certain conditions set forth in the statute and regulations are satisfied. The safe harbor regulations, however, do not comprehensively describe all lawful arrangements, and the failure of an arrangement to satisfy all of the requirements of a particular safe harbor does not mean that the arrangement is unlawful. Failure to comply with the safe harbor provisions, however, may mean that the arrangement will be subject to scrutiny by the OIG.

Many states have adopted similar prohibitions. Some of these state laws lack specific "safe harbors" that may be available under federal law. Sanctions under these state anti-kickback laws may include civil money penalties, license suspension or revocation, exclusion from Medicare or Medicaid, and criminal fines or imprisonment.

We believe that our contracts and arrangements are not in violation of applicable anti-kickback or related laws. We cannot assure you, however, that these laws will ultimately be interpreted in a manner consistent with our practices.

FALSE CLAIMS ACTS. We are subject to state and federal laws that govern the submission of claims for reimbursement. The federal Civil False Claims Act imposes civil liability on individuals or entities that submit, or "cause" to be submitted, false or fraudulent claims for payment to the government. Violations of the Civil False Claims Act may result in treble damages, civil monetary penalties for each false claim submitted and exclusion from the Medicare and Medicaid programs. In addition, we could be subject to criminal penalties under a variety of federal statutes to the extent that we knowingly violate legal requirements under federal health programs or otherwise present or cause the presentation of false or fraudulent claims or documentation to the government. In addition, the OIG may impose extensive and costly corporate integrity requirements upon entities and individuals subject to a false claims judgment or settlement. These requirements may include the creation of a formal compliance program, the appointment of an independent review organization, and the imposition of annual reporting requirements and audits conducted by an independent review organization to monitor compliance with the terms of the agreement and relevant laws and regulations.

The Federal Civil False Claims Act also allows a private individual to bring a "qui tam" suit on behalf of the government for violations of the Civil False Claims Act, and if successful, the "qui tam" relator shares in the government's recovery. A qui tam suit may be brought by, with only a few exceptions, any private citizen who has material information of a false claim that has not yet been previously disclosed. Recently, the number of qui tam suits brought in the healthcare industry has increased dramatically. In addition, several states have enacted laws modeled after the Federal Civil False Claims Act.

CIVIL MONETARY PENALTIES. The Civil Monetary Penalties Statute states that civil penalties ranging between \$10,000 and \$50,000 per claim or act may be imposed on any person or entity that knowingly submits, or causes the submission of, improperly filed claims for federal health benefits, or makes payments to

induce a beneficiary or provider to reduce or limit the use of healthcare services or to use a particular provider or supplier. Civil monetary penalties may be imposed for violations of the anti-kickback statute and for the failure to return known overpayments, among other things.

PROHIBITION ON EMPLOYING OR CONTRACTING WITH EXCLUDED PROVIDERS. The Social Security Act and federal regulations state that individuals or entities that have been convicted of a criminal offense related to the delivery of an item or service under the Medicare or Medicaid programs or that have been convicted, under state or federal law, of a criminal offense relating to neglect or abuse of residents in connection with the delivery of a healthcare item or service cannot participate in any federal healthcare programs, including Medicare and Medicaid.

HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT OF 1996. HIPAA created new healthcare related crimes, and granted authority to the Secretary of the Department of Health and Human Services ("HHS") to impose certain civil penalties. Particularly, the Secretary may now exclude from Medicare

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any individual with a direct or indirect ownership interest in an entity convicted of healthcare fraud or excluded from the program. Under HIPAA and other healthcare laws, it is a crime to knowingly and willfully commit a healthcare fraud, and knowingly and willfully falsify, or conceal material information or make any materially false or fraudulent statements in connection with claims and payment for healthcare services by a healthcare benefit plan. HIPAA also created new programs to control fraud and abuse, and requires new investigations, audits and inspections.

We believe that operations materially comply with applicable regulatory requirements. There can be no assurance that the outcome of any inquiry audit or investigation will be undertaken by HHS, OIG or DOJ. If we are ever found to have engaged in improper practices, we could be subjected to civil, administrative or criminal fines, penalties or restitutionary relief, and suspension or exclusion of the entity or individuals from participation in federal and state healthcare programs.

PATIENT INFORMATION AND PRIVACY. HIPAA also mandates, among other things, the establishment of regulatory standards addressing the electronic exchange of health information, standards for the privacy and security of health information maintained or exchanged electronically, and standards for assigning unique health identifiers to healthcare providers. Sanctions for failure to comply with HIPAA standards include civil and criminal penalties. The Security Standards require us to implement certain security measures to protect certain individually identifiable health information, called protected health information, or PHI, in electronic format. The Standards for Privacy of Individually Identifiable Information restrict use and disclosure of PHI unless patient authorization for such disclosures are obtained. These Privacy Standards not only require our compliance with standards restricting the use and disclosure of PHI, but also require us to obtain satisfactory assurances that any business associate of ours who has access to our PHI similarly will safeguard such PHI.

We have evaluated these rules to determine the effects of the rules on our business, and we believe that we have taken the appropriate steps to ensure that we will comply with these standards in all material respects by their respective compliance deadlines.

OUR BUSINESS INVOLVES ENVIRONMENTAL RISKS THAT MAY RESULT IN LIABILITY.

We are subject to a variety of local, state, federal and foreign government regulations relating to storage, discharge, handling, emission, generation, manufacture and disposal of toxic, infectious or other hazardous substances used to manufacture our products. If we fail to comply with these regulations, we could be liable for damages, penalties, or other forms of censure and our business could be significantly and adversely affected. We currently do not carry insurance for contamination or injury resulting from the use of such materials.

Two of our marketed products, ProstaScint and Quadramet utilize radioactive materials. ProstaScint is not manufactured or shipped as a radioactive material because the radioactive component is not added until the product has arrived at its final destination (a radiopharmacy). Laureate Pharma, our most recent contract manufacturer of ProstaScint, holds a radioactive materials license because such license is required for certain release and stability tests of the product.

Quadramet however, is manufactured and shipped as radioactive, and therefore, the manufacturing and distribution of this product must comply with regulations promulgated by the U.S. Nuclear Regulatory Commission. BMSMI manufacturers and distributes Quadramet, and is, therefore, subject to these regulations.

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WE HAVE BEEN SUBJECT TO PATENT LITIGATION.

On March 17, 2000, we were served with a complaint filed against us in the United States District Court for the District of New Jersey by M. David Goldenberg and Immunomedics, Inc. (collectively "Plaintiffs"). The litigation claimed that our ProstaScint product infringes a patent purportedly owned by Goldenberg and licensed to Immunomedics. We believe that ProstaScint did not infringe this patent, and that the patent was invalid and unenforceable. In June 2004, the U.S. Court of Appeals for the Federal Circuit affirmed the district court's grant of summary judgment of no literal infringement. Regarding infringement under the doctrine of equivalents, however, the U.S. Court of Appeals for the Federal Circuit disagreed with the district court's conclusion that there was no issue of material fact and reversed the district court's grant of summary judgment on this point and remanded for further proceedings on the issue. In September 2004, we settled the patent infringement suit for an undisclosed payment, without any admission of fault or liability.

We cannot give any assurance that we will not become subject to additional patent litigation in the future, which could result in material expenditures to us.

OUR STOCK PRICE HAS BEEN AND MAY CONTINUE TO BE VOLATILE, AND YOUR INVESTMENT IN OUR STOCK COULD DECLINE IN VALUE OR FLUCTUATE SIGNIFICANTLY.

The market prices for securities of biotechnology and pharmaceutical companies have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. The market price of our common stock has fluctuated over a wide range and may continue to fluctuate for various reasons, including, but not limited to, announcements concerning our competitors or us regarding:

o results of clinical trials;

- o technological innovations or new commercial products;
- o changes in governmental regulation or the status of our regulatory approvals or applications;
- o changes in earnings;
- o changes in health care policies and practices;
- o developments or disputes concerning proprietary rights;
- o litigation or public concern as to safety of the our potential products;
- o changes in general market conditions.

These fluctuations may be exaggerated if the trading volume of our common stock is low. These fluctuations may or may not be based upon any of our business or operating results. Our common stock may experience similar or even more dramatic price and volume fluctuations which may continue indefinitely.

WE HAVE ADOPTED VARIOUS ANTI-TAKEOVER PROVISIONS WHICH MAY AFFECT THE MARKET PRICE OF OUR COMMON STOCK AND PREVENT OR FRUSTRATE ATTEMPTS BY OUR STOCKHOLDERS TO REPLACE OR REMOVE OUR MANAGEMENT TEAM.

Our Board of Directors has the authority, without further action by the holders of common stock, to issue from time to time, up to 5,400,000 shares of preferred stock in one or more classes or series, and

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to fix the rights and preferences of the preferred stock. Pursuant to these provisions, we have implemented a stockholder rights plan by which one preferred stock purchase right is attached to each share of common stock, as a means to deter coercive takeover tactics and to prevent an acquirer from gaining control of us without some mechanism to secure a fair price for all of our stockholders if an acquisition was completed. These rights will be exercisable if a person or group acquires beneficial ownership of 20% or more of our common stock and can be made exercisable by action of our board of directors if a person or group commences a tender offer which would result in such person or group beneficially owning 20% or more of our common stock. Each right will entitle the holder to buy one one-thousandth of a share of a new series of our junior participating preferred stock for \$20. If any person or group becomes the beneficial owner of 20% or more of our common stock (with certain limited exceptions), then each right not owned by the 20% stockholder will entitle its holder to purchase, at the right's then current exercise price, common shares having a market value of twice the exercise price. In addition, if after any person has become a 20% stockholder, we are involved in a merger or other business combination transaction with another person, each right will entitle its holder (other than the 20% stockholder) to purchase, at the right's then current exercise price, common shares of the acquiring company having a value of twice the right's then current exercise price.

We are subject to provisions of Delaware corporate law which, subject to certain exceptions, will prohibit us from engaging in any "business combination" with a person who, together with affiliates and associates, owns 15% or more of our common stock for a period of three years following the date that the person came to own 15% or more of our common stock unless the business combination is approved in a prescribed manner.

These provisions of the stockholder rights plan, our certificate of incorporation, and of Delaware law may have the effect of delaying, deterring or preventing a change in control of Cytogen, may discourage bids for our common stock at a premium over market price and may adversely affect the market price, and the voting and other rights of the holders, of our common stock. In addition, these provisions make it more difficult to replace or remove our current management team in the event our stockholders believe this would be in the best interest of the Company and our stockholders.

THE LIQUIDITY OF OUR COMMON STOCK COULD BE ADVERSELY AFFECTED IF WE ARE DELISTED FROM THE NASDAQ NATIONAL MARKET.

In the event that we are unable maintain compliance with all relevant Nasdaq Listing Standards, our securities may be subject to delisting from the Nasdaq National Market. If such delisting occurs, the market price and market liquidity of our common stock may be adversely affected.

Alternatively, if faced with such delisting, we may submit an application to transfer the listing of our common stock to the Nasdaq SmallCap Market. The Nasdaq SmallCap Market also has a \$1.00 minimum bid price requirement. On November 3, 2004, the closing sale price of our common stock as reported by Nasdaq was \$10.26.

If our common stock is delisted by Nasdaq, our common stock would be eligible to trade on the OTC Bulletin Board maintained by Nasdaq, another over-the-counter quotation system, or on the pink sheets where an investor may find it more difficult to dispose of or obtain accurate quotations as to the market value of our common stock. In addition, we would be subject to a rule promulgated by the Securities and Exchange Commission that, if we fail to meet criteria set forth in such rule, imposes various practice requirements on broker-dealers who sell securities governed by the rule to persons other than established customers and accredited investors. Consequently, such rule may deter broker-dealers from recommending or selling our common stock, which may further affect the liquidity of our common stock.

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Delisting from Nasdaq would make trading our common stock more difficult for investors, potentially leading to further declines in our share price. It would also make it more difficult for us to raise additional capital. Further, if we are delisted, we would also incur additional costs under state blue sky laws in connection with any sales of our securities. These requirements could severely limit the market liquidity of our common stock and the ability of our shareholders to sell our common stock in the secondary market.

A LARGE NUMBER OF OUR SHARES ARE ELIGIBLE FOR FUTURE SALE WHICH MAY ADVERSELY IMPACT THE MARKET PRICE OF OUR COMMON STOCK.

A large number of shares of our common stock are already outstanding, issuable upon exercise of options and warrants, or the achievement of certain milestones under previously completed acquisitions and may be eligible for resale. This availability of a significant number of additional shares of our common stock for future sale and issuance could depress the price of our common stock.

BECAUSE WE DO NOT INTEND TO PAY, AND HAVE NOT PAID, ANY CASH DIVIDENDS ON OUR SHARES OF COMMON STOCK, OUR STOCKHOLDERS WILL NOT BE ABLE TO RECEIVE A RETURN ON THEIR SHARES UNLESS THE VALUE OF OUR SHARES APPRECIATES AND THEY SELL THEM.

We have never paid or declared any cash dividends on our common stock or

other securities and intend to retain any future earnings to finance the development and expansion of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Therefore, our stockholders will not be able to receive a return on their shares unless the value of our shares appreciates and they sell them.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements regarding future events and our future results are based on current expectations, estimates, forecasts, and projections and the beliefs and assumptions of our management including, without limitation, our expectations regarding results of operations, selling, general and administrative expenses, research and development expenses and the sufficiency of our cash for future operations. Forward-looking statements may be identified by the use of forward-looking terminology such as "may," "will," "expect," "estimate," "anticipate," "continue," or similar terms, variations of such terms or the negative of those terms. These forward-looking statements include statements regarding our agreements with our collaborative partners, our intent to hold our investments until maturity, additional funding of the PSMA technologies, potential charges resulting from the closure of AxCell BioSciences, growth and market penetration for Quadramet and ProstaScint, revenues, if any, from NMP22 BladderChek and from our joint venture with Progenics Pharmaceuticals Inc., increased expenses resulting from our sales force and marketing expansion, including sales and marketing expenses for Quadramet, the sufficiency of our capital resources, our need for additional capital and other statements included in this prospectus that are not historical facts. Such forward-looking statements involve a number of risks and uncertainties and investors are cautioned not to put any undue reliance on any forward-looking statement. We cannot guarantee that we will actually achieve the plans, intentions or expectations disclosed in any such forward-looking statements. Factors that could cause actual results to differ materially, include, market acceptance of our products, the results of our clinical trials, our ability to hire and retain employees, economic and market conditions generally, our receipt of requisite regulatory approvals for our products and product candidates, the continued cooperation of our marketing and other collaborative and strategic partners, our ability to protect our intellectual property, and the other risks identified herein under the caption "Risk Factors."

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Any forward-looking statements made by us do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. You should read and interpret any forward-looking statements together with the following documents:

- o our most recent Annual Report on Form 10-K;
- o our most recent quarterly report of Form 10-Q;
- o the risk factors contained in this prospectus under the caption "Risk Factors"; and
- o our other filings with the Securities and Exchange Commission.

Any forward-looking statement speaks only as of the date on which that statement is made. We will not update any forward-looking statement to reflect events or circumstances that occur after the date on which such statement is

made.

USE OF PROCEEDS

We will receive all of the net proceeds from the sale of our securities registered under the registration statement of which this prospectus is a part.

Unless the applicable prospectus supplement states otherwise, we will retain broad discretion in the allocation of the net proceeds of this offering. We currently intend to use the net proceeds of this and any future issuances for:

- o expansion of our sales and marketing capabilities;
- o research and development on existing or new products;
- o potential product acquisitions and/or potential acquisitions of complementary businesses; and
- o other general corporate purposes, including principally working capital and capital expenditures.

We have not determined the amount of net proceeds to be used for each of the specific purposes indicated. The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as the progress of our research and development efforts, technological advances and the competitive environment for our products. Accordingly, we will have broad discretion to use the proceeds as we see fit. Pending such uses, we intend to invest the net proceeds in interest-bearing, investment grade securities.

RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table sets forth our dollar coverage deficiency. The ratio of earnings to fixed charges is not disclosed since it is a negative number in each year and period shown below. Any time we offer debt securities pursuant to this prospectus, we will provide an updated table setting forth our ratio of earnings to fixed charges on a historical basis in the applicable prospectus supplement, if required. Any time we offer shares of preferred stock pursuant to this prospectus, we will provide a table setting forth our ratio of combined fixed charges and preferred stock dividends to earnings, if required.

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| | Year Ended December 31, | | | | | |
|--|----------------------------|------------|------------|------------|------------|--|
| | 1999 | 2000 | 2001 | 2002 | 2003 | |
| | (All Amounts in Thousands) | | | | | |
| Ratio of Earnings to Fixed Charges | | | | | | |
| Earnings Available to Cover Fixed Charges (Deficiency) | \$(1,973) | \$(24,609) | \$(13,203) | \$(15,699) | \$(10,246) | |

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DESCRIPTION OF DEBT SECURITIES

We may offer senior debt securities, subordinated debt securities or both. Senior debt securities and subordinated debt securities will be issued under separate indentures between us, as issuer, and the trustee identified in a prospectus supplement. Further information regarding the trustee may be provided in the prospectus supplement. The form for each type of indenture is filed as an exhibit to the registration statement of which this prospectus is a part.

The prospectus supplement will describe the particular terms of any debt securities we may offer and may supplement the terms summarized below. The following summaries of the debt securities and the indentures are not complete and may be modified by the description of particular debt securities in a prospectus supplement. We urge you to read the indenture filed as an exhibit to the registration statement that relates to debt securities offered in a prospectus supplement and the description of the additional terms of the debt securities included in the prospectus supplement.

GENERAL

The indentures provide that we may issue an unlimited principal amount of debt securities in separate series. We may specify a maximum aggregate principal amount for the debt securities of any series. The debt securities will have maturities that are set forth in the prospectus supplement. Senior debt securities will be unsecured and unsubordinated obligations and will rank equally with all our other unsecured and unsubordinated debt. Subordinated debt securities will be unsecured obligations and may be paid by us only if all payments due under our senior indebtedness, including any outstanding senior debt securities, have been made.

The indentures might not limit the amount of other debt that we may incur and might not contain financial or similar restrictive covenants. The indentures might not contain any provision to protect holders of debt securities against transactions that may cause a sudden or dramatic decline in our ability to pay our debt.

The prospectus supplement will describe the debt securities and the price or prices at which we will offer the debt securities. The description will include:

- o the title of the debt securities;
- o any limit on the aggregate principal amount of the debt securities or the series of which they are a part;

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- o the person to whom any interest on a debt security of the series will be paid;
- o the date or dates on which we must repay the principal;
- o the rate or rates at which the debt securities will bear interest;
- o the date or dates from which interest will accrue and the dates on which we must pay interest;
- o the place or places where we must pay the principal and any premium or interest on the debt securities;

- o the terms and conditions on which we may redeem any debt security, if at all;
- o any obligation to redeem or purchase any debt securities and the terms and conditions on which we must do so;
- o the denominations in which we may issue the debt securities;
- o the manner in which we will determine the amount of principal of or any premium or interest on the debt securities;
- o the currency in which we will pay the principal of and any premium or interest on the debt securities;
- o if applicable, that the debt securities are defeasible and the terms of such defeasance;
- o if applicable, the terms of any right to convert debt securities into, or exchange debt securities for, shares of common stock or other securities or property;
- o whether we will issue the debt securities in the form of one or more global securities and, if so, the respective depositaries for the global securities and the terms of the global securities;
- o the subordination provisions that will apply to any subordinated debt securities;
- o any addition to or change in the events of default applicable to the debt securities and any change in the right of the trustee or the holders to declare the principal amount of any of the debt securities due and payable;
- o any addition to or change in the covenants in the indentures; and
- o any other terms of the debt securities not inconsistent with the applicable indenture.

We may sell the debt securities at a substantial discount below their stated principal amount. We will describe U.S. federal income tax considerations applicable to debt securities sold at an original issue discount in the prospectus supplement. An original issue discount security is any debt security sold for less than its face value and which provides that the holder cannot receive the full face value if maturity is accelerated. The prospectus supplement relating to any original issue discount securities will describe the particular provisions relating to acceleration of the maturity upon the occurrence of an event of default. In addition, we will describe in the prospectus supplement U.S. federal income tax or other considerations applicable to any debt securities that are denominated in a currency or unit other than U.S. dollars.

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CONVERSION AND EXCHANGE RIGHTS

The prospectus supplement will describe, if applicable, the terms on which you may convert debt securities into or exchange them for common stock or other securities or property. The conversion or exchange may be mandatory or may be at your option. The prospectus supplement will describe how the number of shares of common stock or other securities or property to be received upon conversion or

exchange would be calculated.

SUBORDINATION OF SUBORDINATED DEBT SECURITIES

The indebtedness underlying the subordinated debt securities may be paid by us only if all payments due under our senior indebtedness, including any outstanding senior debt securities, have been made. If we distribute our assets to creditors upon any dissolution, winding-up, liquidation or reorganization or in bankruptcy, insolvency, receivership or similar proceedings, we must first pay all amounts due or to become due on all senior indebtedness before we pay the principal of, or any premium or interest on, the subordinated debt securities. In the event the subordinated debt securities are accelerated because of an event of default, we may not make any payment on the subordinated debt securities until we have paid all senior indebtedness or the acceleration is rescinded. If the payment of subordinated debt securities accelerates because of an event of default, we must promptly notify holders of senior indebtedness of the acceleration.

If we experience a bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of subordinated debt securities may receive less, ratably, than our other creditors. The indenture for subordinated debt securities may not limit our ability to incur additional senior indebtedness.

FORM, EXCHANGE AND TRANSFER

We will issue debt securities in the form of global securities or in fully registered form, without coupons, in denominations of \$1,000 and integral multiples thereof. The holder of a debt security in fully registered form may elect, subject to the terms of the applicable indenture, to exchange them for other debt securities of the same series of any authorized denomination and of similar terms and aggregate principal amount.

Holders of debt securities in fully registered form may present them for exchange as provided above or for registration of transfer, duly endorsed or with the form of transfer duly executed, at the office of the transfer agent we designate for that purpose. We will not impose a service charge for any registration of transfer or exchange of debt securities, but we may require a payment sufficient to cover any tax or other governmental charge payable in connection with the transfer or exchange. We will name the transfer agent in the prospectus supplement. We may designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, but we must maintain a transfer agent in each place where we will make payment on debt securities.

If we redeem the debt securities, we will not be required to issue, register the transfer of or exchange any debt security during a specified period prior to mailing a notice of redemption. We are not required to register the transfer of or exchange of any debt security selected for redemption, except the unredeemed portion of the debt security being redeemed.

PAYMENT AND PAYING AGENTS

We will pay principal and any premium or interest on a debt security to the person in whose name the debt security is registered at the close of business on the regular record date for such interest.

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We will pay principal and any premium or interest on the debt securities at

the office of our designated paying agent. Unless the prospectus supplement indicates otherwise, the corporate trust office of the trustee will be the paying agent for the debt securities.

Any other paying agents we designate for the debt securities of a particular series will be named in the prospectus supplement. We may designate additional paying agents, rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, but we must maintain a paying agent in each place of payment for the debt securities.

The paying agent will return to us all money we pay to it for the payment of the principal, premium or interest on any debt security that remains unclaimed for a specified period. Thereafter, the holder may look only to us for payment, as an unsecured general creditor.

CONSOLIDATION, MERGER AND SALE OF ASSETS

Under the terms of the indentures, so long as any securities remain outstanding, we may not consolidate or enter into a share exchange with or merge into any other person, in a transaction in which we are not the surviving corporation, or sell, convey, transfer or lease our properties and assets substantially as an entirety to any person, unless:

- o the successor assumes our obligations under the debt securities and the indentures; and
- o we meet the other conditions described in the indentures.

EVENTS OF DEFAULT

Each of the following will constitute an event of default under each indenture with respect to any series of debt securities:

- o failure to pay the principal of or any premium on any debt security of that series when due;
- o failure to pay any interest on any debt security of that series when due, for more than a specified number of days past the due date;
- o failure to deposit any sinking fund payment with respect to debt securities of that series when due;
- o failure to perform any covenant or agreement in the indenture that continues for a specified number of days after written notice has been given by the trustee or the holders of a specified percentage in aggregate principal amount of the debt securities of that series;
- o certain events of bankruptcy, insolvency or reorganization; and
- o any other event of default specified in the prospectus supplement.

If an event of default occurs and continues, either the trustee or holders of a specified percentage in aggregate principal amount of the outstanding securities of that series may declare the principal amount of the debt securities of that series to be immediately due and payable. The holders of a majority in aggregate principal amount of the outstanding securities of that series may rescind and annul the acceleration if all events of default, other than the nonpayment of accelerated principal, have been cured or waived.

Except for its duties in case of an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request or direction of any of the holders, unless the holders have offered the trustee reasonable indemnity. If they provide this indemnification, the holders of a majority in aggregate principal amount of the outstanding securities of any series may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of a debt security of any series may institute any proceeding with respect to an indenture, or for the appointment of a receiver or a trustee, or for any other remedy, unless:

- o the holder has previously given the trustee written notice of a continuing event of default;
- o the holders of a specified percentage in aggregate principal amount of the outstanding securities of that series have made a written request upon the trustee, and have offered reasonable indemnity to the trustee, to institute the proceeding;
- o the trustee has failed to institute the proceeding for a specified period of time after its receipt of the notification; and
- o the trustee has not received a direction inconsistent with the request within a specified number of days from the holders of a specified percentage in aggregate principal amount of the outstanding securities of that series.

MODIFICATION AND WAIVER

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

- o to fix any ambiguity, defect or inconsistency in the indenture; and
- o to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under an indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series. However, we and the trustee may only make the following changes with the consent of the holder of any outstanding debt securities affected:

- o extending the fixed maturity of the debt securities;
- o reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption, of the debt securities; or
- o reducing the percentage of debt securities the holders of which are required to consent to any amendment.

The holders of a majority in principal amount of the outstanding debt securities of any series may waive any past default under the indenture with respect to debt securities of that series, except a default in the payment of principal, premium or interest on any debt security of that series or in respect of a covenant or provision of the indenture that cannot be amended without each holder's consent.

Except in limited circumstances, we may set any day as a record date for the purpose of determining the holders of outstanding debt securities of any series entitled to give or take any direction,

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notice, consent, waiver or other action under the indentures. In limited circumstances, the trustee may set a record date. To be effective, the action must be taken by holders of the requisite principal amount of such debt securities within a specified period following the record date.

DEFEASANCE

To the extent stated in the prospectus supplement, we may elect to apply the provisions in an indenture relating to defeasance and discharge of indebtedness, or to defeasance of restrictive covenants, to the debt securities of any series. The indentures provide that, upon satisfaction of the requirements described below, we may terminate all of our obligations under the debt securities of any series and the applicable indenture, known as legal defeasance, other than our obligation:

- o to maintain a registrar and paying agents and hold monies for payment in trust;
- o to register the transfer or exchange of the debt securities; and
- o to replace mutilated, destroyed, lost or stolen debt securities.

In addition, we may terminate our obligation to comply with any restrictive covenants applicable to debt securities of any series, known as covenant defeasance.

We may exercise our legal defeasance option even if we have previously exercised our covenant defeasance option. If we exercise either defeasance option, payment of the applicable debt securities may not be accelerated because of the occurrence of an event of default.

To exercise either defeasance option as to debt securities of any series, we must irrevocably deposit in trust with the trustee money and/or obligations backed by the full faith and credit of the United States that will provide money in an amount sufficient in the written opinion of a nationally recognized firm of independent public accountants to pay the principal of, premium, if any, and each installment of interest on the debt securities. We may only establish this trust if, among other things:

- o no event of default shall have occurred or be continuing;
- o in the case of legal defeasance, we have delivered to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the Internal Revenue Service a ruling or there has been a change in law, which in the opinion of our counsel, provides that holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;
- o in the case of covenant defeasance, we have delivered to the trustee an opinion of counsel to the effect that the holders of the debt securities

will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred; and

o we satisfy other customary conditions precedent described in the applicable indenture.

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OWNERSHIP

We may treat the person in whose name a debt security is registered as the absolute owner, whether or not such debt security may be overdue, for the purpose of making payment and for all other purposes.

DESCRIPTION OF CAPITAL STOCK

The total number of shares of all classes of stock that we have authority to issue is 30,400,000, consisting of 25,000,000 shares of common stock, par value \$0.01 per share, and 5,400,000 shares of preferred stock, par value \$0.01 per share. We had 15,436,501 shares of common stock, and no shares of preferred stock, outstanding as of November 1, 2004, which number of shares: (i) includes an aggregate of 241 shares of common stock to be issued to prior holders of securities of CytoRad Incorporated and Cellcor, Inc., which we acquired in 1995, upon each such holders respective exchange of such securities; (ii) excludes 50,000 shares of common stock previously issued by us and currently held in escrow pending release, upon certain conditions, to Advanced Magnetics, who currently maintains voting control of such securities; and (iii) excludes 23,833 shares previously issued by us and currently held for issuance by the custodian of our Employee Stock Purchase Plan to the participants thereunder, in the event they elect to purchase such shares.

In the discussion that follows, we have summarized selected provisions of our certificate of incorporation and our bylaws relating to our capital stock. You should read our certificate of incorporation and bylaws as currently in effect for more details regarding the provisions we describe below and for other provisions that may be important to you. We have filed copies of those documents with the SEC, and they are incorporated by reference as exhibits to the registration statement. Please read "Where You Can Find More Information."

COMMON STOCK

The holders of common stock are entitled to one vote per share on all matters voted on by our stockholders, including the election of directors, except as may, in the future, be provided in any resolutions adopted by our board of directors with respect to any series of preferred stock. Except as otherwise required by law or provided in any resolution adopted by our board of directors with respect to any series of preferred stock, the holders of shares of common stock exclusively possess all voting power of our stockholders. Subject to any preferential rights of any then outstanding series of preferred stock, the holders of common stock are entitled to those dividends as may be declared from time to time by our board of directors from funds available for dividends and, upon liquidation, are entitled to receive pro rata all of our assets available for distribution to our stockholders.

PREFERRED STOCK

Our board of directors is authorized to establish one or more series of

preferred stock and to determine, with respect to any series of preferred stock, the powers, designation, preferences and rights of each series and the qualifications, limitations or restrictions of each series, including:

- o the designation of the series;
- o the number of shares of the series, which number the board of directors may, except where otherwise provided in the preferred stock designation, increase or decrease, but not below the number of shares of that series then outstanding;
- o whether dividends, if any, will be cumulative or noncumulative and the dividend rate and the

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preferences, if any, of the series;

- o the dates on which dividends, if any, will be payable;
- o the redemption rights and price or prices, if any, for shares of the series;
- o the terms and amounts of any sinking fund provided for the purchase or redemption of shares of the series;
- o the amounts payable on, and the preferences, if any, of shares of the series in the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs;
- o whether the shares of the series will be convertible into or exchangeable for shares of any other class or series, or any other security, of our company or any other corporation, and, if so, the specification of that class or series or that other security, the conversion or exchange price or prices or rate or rates, any adjustments to those prices or rates, the date or dates as of which such shares will be convertible or exchangeable and all other terms and conditions of the conversion or exchange;
- o restrictions on the issuance of shares of the same series, or of any other class or series; and
- o the voting rights, if any, of the holders of shares of any series.

The prospectus supplement relating to any series of preferred stock we offer will include specific terms relating to the offering. The description of the terms of the preferred stock to be set forth in an applicable prospectus supplement will not be complete and will be subject to and qualified by the certificate of designation relating to the applicable series of preferred stock. You should read that document for provisions that may be important to you. We will include that document as an exhibit to a filing with the SEC in connection with an offering of preferred stock.

The authorized shares of preferred stock, as well as shares of common stock, are available for issuance without further action by our stockholders, unless stockholder action is required by the rules of any stock exchange or automated quotation system on which our securities are listed or traded. If the approval of our stockholders is not required for the issuance of shares of preferred stock or common stock, the board of directors may determine not to seek stockholder approval.

RIGHTS PLAN

In June 1998, we adopted a rights plan under which our board of directors declared a dividend of one preferred stock purchase right for each outstanding share of our common stock held of record as of the close of business on June 30, 1998. Each right initially entitles a stockholder to purchase a one one-thousandth fraction of a share of Preferred Stock -- Series C Junior Participating Participating Preferred Stock for \$20. Each such fraction of a share of preferred stock has terms designed to make it essentially equivalent to one share of common stock. The rights will become exercisable only in the event a person or group acquires 20% or more of our common stock or commences a tender or exchange offer which, if consummated, would result in that person or group owning 20% of our common stock. Prior to such an event, the rights will be evidenced by and traded in tandem with the common stock.

If a person or group acquires a 20% or larger position in Cytogen, each right (except those held by the acquiring party) will then entitle its holder to purchase fractional shares of preferred stock having twice the value of the \$20 exercise price, with each fractional preferred share valued at the market price of the common stock. Also, if following an acquisition of 20% or more of our common stock, Cytogen is

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acquired by that person or group in a merger or other business combination transaction, each right would then entitle its holder to purchase common stock of the acquiring company having a value of twice exercise price. The effect will be to entitle our stockholders to buy stock in the acquiring company at 50% of its market price.

We may redeem the rights at \$0.01 per right at any time on or prior to the acquisition of 20% or more of our common stock by a person or group or commencement of a tender offer for such 20% ownership. The rights expire on June 19, 2008.

OUTSTANDING WARRANTS

At November 1, 2004, we had outstanding warrants to purchase 1,940,619 shares of our common stock. These warrants expire at various times through July 2008, and have a weighted average exercise price of \$11.26 per share.

SPECIAL PROVISIONS OF OUR CHARTER, BYLAWS AND DELAWARE LAW

The following charter and bylaw provisions and provisions of Delaware law may have the effect of delaying, deterring or preventing a change of control.

AUTHORIZATION OF PREFERRED STOCK. As noted above, our board of directors, without stockholder approval, has the authority under our certificate of incorporation to issue preferred stock with rights superior to the rights of the holders of our common stock. As a result, preferred stock:

- o could be issued quickly and easily;
- o could adversely affect the rights of holders of our common stock; and
- o could be issued with terms calculated to delay or prevent a change of control or make removal of management more difficult.

STOCKHOLDER MEETINGS AND WRITTEN CONSENT. Under our bylaws, a special meeting of the stockholders may be called by:

- o the chairman of the board, the president or by resolution of the board of directors; or
- o the president or corporate secretary upon the written request of not less than 50% in interest of the stockholders entitled to vote.

REQUIREMENTS FOR ADVANCE NOTIFICATION OF STOCKHOLDER NOMINATIONS AND PROPOSALS. Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by the board of directors or its committees.

INDEMNIFICATION. Delaware law authorizes Delaware corporations to limit or eliminate the personal liability of directors for monetary damages for breach of a director's fiduciary duty of care. The duty of care requires that, when acting on behalf of the corporation, directors must exercise an informed business judgment based on all material information reasonably available to them. Absent the limitations authorized by Delaware law, directors of Delaware corporations are accountable to those corporations and their stockholders for monetary damages for conduct constituting gross negligence in the exercise of their duty of care. Delaware law enables Delaware corporations to limit available relief to equitable remedies such as injunction or rescission. Our certificate of incorporation limits the liability of our directors to us or our stockholders to the fullest extent Delaware law permits, and no member of our board is personally

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liable for monetary damages for breach of the member's fiduciary duty as a director, except for liability:

- o for any breach of a board member's duty of loyalty to us or our stockholders;
- o for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- o for unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- o for any transaction from which the member derived an improper personal benefit.

This provision may discourage derivative litigation against our directors and may discourage or deter our stockholders or management from bringing a lawsuit against our directors for breach of their duty of care, even though such an action, if successful, might otherwise have benefited us and our stockholders. Our bylaws provide indemnification to our officers and directors and other specified persons with respect to their conduct in various capacities.

TRANSFER AGENT OR REGISTRAR

American Stock Transfer & Trust Company is the transfer agent and registrar of our common stock.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase debt securities, preferred stock, common stock, or units. We may issue warrants independently or together with other

securities. Warrants sold with other securities may be attached to or separate from the other securities. We will issue each series of warrants under a separate warrant agreement between us and a warrant agent that we will name in the prospectus supplement. We will describe additional terms of the warrants and the applicable warrant agreements in the applicable prospectus supplement.

GENERAL

If warrants are offered, the prospectus supplement relating to a series of warrants will include the specific terms of the warrants, including:

- o the offering price;
- o the title of the warrants;
- o the aggregate number of warrants offered;
- o the dates or periods during which the warrants can be exercised;
- o whether the warrants will be issued in individual certificates to holders or in the form of global securities held by a depositary on behalf of holders;
- o the designation and terms of any securities with which the warrants are issued;
- o if the warrants are issued as a unit with another security, the date, if any, on and after which the warrants and the other security will be separately transferable;

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- o if the exercise price is not payable in U.S. dollars, the foreign currency, currency unit or composite currency in which the exercise price is denominated;
- o any terms, procedures and limitations relating to the transferability, exchange or exercise of the warrants;
- o any special tax implications of the warrants or their exercise;
- o any antidilution provisions of the warrants;
- o any redemption or call provisions applicable to the warrants; and
- o any other terms of the warrants.

TRANSFERS AND EXCHANGES

A holder will be able to exchange warrant certificates for new warrant certificates of different denominations, or to transfer warrants, at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement. Prior to exercise, holders of warrants will have none of the rights of holders of the underlying securities.

EXERCISE

Holders will be able to exercise warrants up to $5:00\ P.M.$ New York City time on the date set forth in the prospectus supplement as the expiration date.

After this time, unless we have extended the expiration date, the unexercised warrants will be void.

Subject to any restrictions and additional requirements that may be set forth in a prospectus supplement, holders of warrants may exercise them by delivering to the warrant agent at its corporate trust office the following:

- o warrant certificates properly completed; and
- o payment of the exercise price.

As soon as practicable after the delivery, we will issue and deliver to the indicated holder the securities purchasable upon exercise. If a holder does not exercise all the warrants represented by a particular certificate, we will also issue a new certificate for the remaining number of warrants.

NO RIGHTS OF SECURITY HOLDER PRIOR TO EXERCISE

Prior to the exercise of their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon the exercise of the warrants, and will not be entitled to:

- o in the case of warrants to purchase debt securities, payments of principal of, premium, if any, or interest, if any, on the debt securities purchasable upon exercise; or
- o in the case of warrants to purchase equity securities, the right to vote or to receive dividend payments or similar distributions on the securities purchasable upon exercise.

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ENFORCEABILITY OF RIGHTS BY HOLDERS OF WARRANTS

Each warrant agent will act solely as our agent under the relevant warrant agreement and will not assume any obligation or relationship of agency or trust for any warrantholder. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility if we default in performing our obligations under the relevant warrant agreement or warrant, including any duty or responsibility to initiate any legal proceedings or to make any demand upon us.

TITLE

We and the warrant agents and any of our respective agents may treat the registered holder of any warrant certificate as the absolute owner of the warrants evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the warrants so requested, despite any notice to the contrary.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of one or more shares of common stock, shares of preferred stock, warrants, debt securities or any combination of such securities. The applicable prospectus supplement will describe:

o the securities comprising the units, including whether and under what circumstances the securities comprising the units may be separately traded;

- o the terms and conditions applicable to the units, including a description of the terms of any applicable unit agreement governing the units; and
- o a description of the provisions for the payment, settlement, transfer or exchange of the units.

GLOBAL SECURITIES

We may issue the debt securities, warrants and units of any series in the form of one or more fully registered global securities that will be deposited with a depositary or with a nominee for a depositary and registered in the name of the depositary or its nominee. In that case, one or more global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of outstanding registered securities of the series to be represented by such global securities. Unless and until the depositary exchanges a global security in whole for securities in definitive registered form, the global security may not be transferred except as a whole by the depositary to a nominee of the depositary or by a nominee of the depositary to the depositary or another nominee of the depositary or by the depositary or any of its nominees to a successor of the depositary or a nominee of such successor.

The specific terms of the depositary arrangement with respect to any portion of a series of securities to be represented by a global security will be described in the prospectus supplement relating to such series. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a global security will be limited to persons that have accounts with the depositary for such global security known as "participants" or persons that may hold interests through such participants.

Upon the issuance of a global security, the depositary for such global security will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face

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amounts of the securities represented by the global security beneficially owned by the participants. The accounts to be credited shall be designated by any dealers, underwriters or agents participating in the distribution of such securities.

Ownership of beneficial interests in such global security will be shown on, and the transfer of such ownership interests will be effected only through, records maintained by the depositary for such global security (with respect to interests of participants) and on the records of participants (with respect to interests of persons holding through participants). The laws of some states may require that certain purchasers of securities take physical delivery of such securities in definitive form. Such limits and such laws may impair the ability to own, transfer or pledge beneficial interests in global securities.

So long as the depositary for a global security, or its nominee, is the registered owner of such global security, such depositary or such nominee, as the case may be, will be considered the sole owner or holder of the securities represented by such global security for all purposes under the applicable indenture, warrant agreement, purchase contract or unit agreement. Except as set forth below, owners of beneficial interests in a global security will not be entitled to have the securities represented by such global security registered in their names, will not receive or be entitled to receive physical delivery of such securities in definitive form and will not be considered the owners or

holders thereof under the applicable indenture, warrant agreement, purchase contract or unit agreement. Accordingly, each person owning a beneficial interest in a global security must rely on the procedures of the depositary for the global security and, if such person is not a participant, on the procedures of the participant through which such person owns its interest, to exercise any rights of a holder under the applicable indenture, warrant agreement, purchase contract or unit agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a global security desires to give or take any action which a holder is entitled to give or take under the applicable indenture, warrant agreement, purchase contract or unit agreement, the depositary for such global security would authorize the participants holding the relevant beneficial interests to give or take such action, and such participants would authorize beneficial owners owning through such participants to give or take such action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities, and any payments to holders with respect to warrants, purchase contracts or units represented by a global security registered in the name of a depositary or its nominee will be made to such depositary or its nominee, as the case may be, as the registered owner of such global security. None of us, the trustees, the warrant agents, the unit agents or any of our other agents, agent of the trustees or agent of the warrant agents or unit agents will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in such global security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

We expect that the depositary for any securities represented by a global security, or its nominee, upon receipt of any payment of principal, premium, interest or other distribution of underlying securities or commodities to holders in respect of such global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in such global security as shown on the records of such depositary or its nominee. We also expect that payments by participants to owners of beneficial interests in such global security held through such participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such participants.

If the depositary for any securities represented by a global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, and we do not appoint a successor depositary registered as a clearing agency under the Exchange Act within

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90 days, we will issue such securities in definitive form in exchange for such global security. In addition, we may at any time and in our sole discretion determine not to have any of the securities of a series represented by one or more global securities and, in such event, will issue securities of such series in definitive form in exchange for all of the global security or securities representing such securities. Any securities issued in definitive form in exchange for a global security will be registered in such name or names as the depositary shall instruct the relevant trustee, warrant agent or other relevant agent of ours. We expect that such instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in such global security.

PLAN OF DISTRIBUTION

We may sell our securities from time to time through underwriters, dealers or agents or directly to purchasers, in one or more transactions at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. We may use these methods in any combination.

BY UNDERWRITERS

We may use an underwriter or underwriters in the offer or sale of our securities.

- o If we use an underwriter or underwriters, the offered securities will be acquired by the underwriters for their own account pursuant to the terms of an underwriting agreement between us and the underwriters entered into at the time of sale.
- o We will include the names of the specific managing underwriter or underwriters, as well as any other underwriters, and the terms of the transactions, including the compensation the underwriters and dealers will receive, in the prospectus supplement.
- o The underwriters will use this prospectus and the prospectus supplement to sell our securities.

We may also sell securities pursuant to one or more standby agreements with one or more underwriters in connection with the call, redemption or exchange of a specified class or series of any of our outstanding securities. In a standby agreement, the underwriter or underwriters would agree either:

- o to purchase from us up to the number of shares of common stock that would be issuable upon conversion or exchange of all the shares of the class or series of our securities at an agreed price per share of common stock; or
- o to purchase from us up to a specified dollar amount of offered securities at an agreed price per offered security, which price may be fixed or may be established by formula or other method and which may or may not relate to market prices of our common stock or any other outstanding security.

The underwriter or underwriters would also agree, if applicable, to convert or exchange any securities of the class or series held or purchased by the underwriter or underwriters into or for our common stock or other security.

The underwriter or underwriters may assist in the solicitation of conversions or exchanges by holders of the class or series of securities.

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BY DEALERS

We may use a dealer to sell our securities.

- o If we use a dealer, we, as principal, will sell our securities to the
- o The dealer will then resell our securities to the public at varying prices that the dealer will determine at the time it sells our securities.
- o We will include the name of the dealer and the terms of our transactions

with the dealer in the prospectus supplement.

BY AGENTS

We may designate agents to solicit offers to purchase our securities.

- o We will name any agent involved in offering or selling our securities and any commissions that we will pay to the agent in the prospectus supplement.
- o Unless we indicate otherwise in the prospectus supplement, our agents will act on a best efforts basis for the period of their appointment.
- o Our agents may be deemed to be underwriters under the Securities Act of any of our securities that they offer or sell.

BY DELAYED DELIVERY CONTRACTS

We may authorize our agents and underwriters to solicit offers by certain institutions to purchase our securities at the public offering price under delayed delivery contracts.

- o If we use delayed delivery contracts, we will disclose that we are using them in the prospectus supplement and will tell you when we will demand payment and delivery of the securities under the delayed delivery contracts.
- o These delayed delivery contracts will be subject only to the conditions that we set forth in the prospectus supplement.
- o We will indicate in the prospectus supplement the commission that underwriters and agents soliciting purchases of our securities under delayed delivery contracts will be entitled to receive.

We may directly solicit offers to purchase our securities, and we may directly sell our securities to institutional or other investors, including our affiliates. We will describe the terms of our direct sales in the prospectus supplement. We may also sell our securities upon the exercise of rights which we may issue.

GENERAL INFORMATION

Underwriters, dealers and agents that participate in the distribution of our securities may be underwriters as defined in the Securities Act, and any discounts or commissions they receive and any profit they make on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. Any underwriters or agents will be identified and their compensation described in a prospectus supplement. We may indemnify agents, underwriters and dealers against certain civil liabilities, including liabilities under the Securities Act, or make contributions to payments they may be required to make relating to those liabilities. Our agents, underwriters, and dealers,

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or their affiliates, may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

Each series of securities offered by this prospectus may be a new issue of securities with no established trading market. Any underwriters to whom securities offered by this prospectus are sold by us for public offering and sale may make a market in the securities offered by this prospectus, but the

underwriters will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given as to the liquidity of the trading market for any securities offered by this prospectus.

Representatives of the underwriters through whom our securities are sold for public offering and sale may engage in over-allotment, stabilizing transactions, syndicate short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves syndicate sales in excess of the offering size, which creates a syndicate short position. Stabilizing transactions permit bids to purchase the offered securities so long as the stabilizing bids do not exceed a specified maximum.

Syndicate covering transactions involve purchases of the offered securities in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the representative of the underwriters to reclaim a selling concession from a syndicate member when the offered securities originally sold by such syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Such stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the offered securities to be higher than it would otherwise be in the absence of such transactions. These transactions may be effected on a national securities exchange and, if commenced, may be discontinued at any time. Underwriters, dealers and agents may be customers of, engage in transactions with or perform services for, us and our subsidiaries in the ordinary course of business.

LEGAL MATTERS

The validity of the shares of common stock offered hereby has been passed upon by Morgan, Lewis & Bockius LLP, Philadelphia, Pennsylvania.

EXPERTS

The consolidated financial statements of Cytogen Corporation and subsidiaries as of December 31, 2003 and 2002 and for the years then ended, have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent accountants, and PricewaterhouseCoopers LLP, an independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firms as experts in accounting and auditing. KPMG LLP's audit report refers to its audit of the adjustments that were applied to restate the 2001 consolidated financial statements, as more fully described in Note 1 to the consolidated financial statements. However, KPMG LLP was not engaged to and did not audit, review, or apply any procedures to the 2001 consolidated financial statements other than with respect to such adjustments.

The consolidated balance sheet of Cytogen Corporation as of December 31, 2001 and the consolidated statements of operations, stockholders' equity and cash flows for the year then ended, have been incorporated by reference in this prospectus, and in the registration statement of which this prospectus is a part, from the Annual Report on Form 10-K of Cytogen Corporation. The financial statements for the year ended December 31, 2001 have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their report with respect thereto, and are incorporated by reference herein. The Company has not received an updated or reissued copy of such report dated February 5, 2002, and is relying solely upon the manually-signed report of Arthur Andersen LLP

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previously provided to the Company in connection with the Company's Annual

Report on Form 10-K for the year ended December 31, 2001. Arthur Andersen LLP has not consented to the inclusion of their report in this prospectus, and we have dispensed with the requirement to file their consent in reliance on Rule 437a promulgated under the Securities Act of 1933, as amended. Because Arthur Andersen has not consented to the inclusion of their report in this prospectus, you will not be able to recover against Arthur Andersen under Section 11 of the Securities Act of 1933, as amended, for any untrue statements of a material fact contained in the financial statements audited by Arthur Andersen or any omissions to state a material fact required to be stated therein.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other documents with the SEC. You may read and copy any document we file at the SEC's public reference room at Judiciary Plaza Building, 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC's Internet site at http://www.sec.gov.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's Internet site.

INFORMATION INCORPORATED BY REFERENCE

The SEC requires us to "incorporate" into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. The information incorporated by reference is considered to be part of this prospectus. Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically updates and supersedes previously filed information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, prior to the sale of all the shares covered by this prospectus.

- (1) Our Annual Report on Form 10-K for the year ended December 31, 2003, as filed with the Securities and Exchange Commission on March 15, 2004 (File No. 000-14879);
- Our Current Report on Form 8-K, dated April 14, 2004, as filed with the Securities and Exchange Commission on April 14, 2004 (File No. 000-14879);
- Our Current Report on Form 8-K, dated April 14, 2004, as filed with the Securities and Exchange Commission on April 15, 2004 (File No. 000-14879);
- Our Quarterly Report on Form 10-Q for the period ended March 31, 2004, as filed with the Securities and Exchange Commission on May 7, 2004 (File No. 000-14879);
- (5) Our Current Report on Form 8-K, dated June 25, 2004, as filed with the Securities and Exchange Commission on June 25, 2004 (File No. 000-14879);
- Our Quarterly Report on Form 10-Q for the period ended June 30, 2004, as filed with the Securities and Exchange Commission on August 9, 2004 (File No. 000-14879);

(7) Our Current Report on Form 8-K, dated September 1, 2004, as filed with the Securities and Exchange Commission on September 2, 2004 (File No. 000-14879);

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- (8) Our Current Report on Form 8-K, dated September 3, 2004, as filed with the Securities and Exchange Commission on September 3, 2004 (File No. 000-14879);
- (9) Our Current Report on Form 8-K, dated September 10, 2004, as filed with the Securities and Exchange Commission on September 14, 2004 (File No. 000-14879);
- (10) Our Current Report on Form 8-K, dated September 27, 2004, as filed with the Securities and Exchange Commission on September 29, 2004 (File No. 000-14879);
- (11) Our Current Report on Form 8-K, dated October 18, 2004, as filed with the Securities and Exchange Commission on October 19, 2004 (File No. 000-14879);
- The description of our common stock contained in our Registration Statement on Form 8-A, as supplemented by the disclosure set forth in Exhibit 3.1 to our Form 10-Q Quarterly Report for the quarter ended June 30, 2000 and Exhibit 3 to our Form 10-Q Quarterly Report for the quarter ended June 30, 1996 (File No. 000-14879);
- (13) The description of our Series C Junior Participating Preferred Stock contained in Exhibit 1 to our Current Report on Form 8-K filed with the Securities and Exchange Commission on June 24, 1998 (File No. 333-020015); and
- (14) All of our filings pursuant to the Exchange Act after the date of filing the initial registration statement and prior to effectiveness of the registration statement.

You may request a copy of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

Cytogen Corporation

650 College Road East, 3rd Floor

Princeton, New Jersey 08540

Attention: Senior Vice President and General Counsel

Telephone: 609-750-8223

YOU SHOULD RELY ONLY ON THE INFORMATION INCORPORATED BY REFERENCE OR PROVIDED IN THIS PROSPECTUS OR ANY PROSPECTUS SUPPLEMENT. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION DIFFERENT FROM THAT CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS. THE SELLING STOCKHOLDERS ARE OFFERING TO SELL, AND SEEKING OFFERS TO BUY, SHARES OF OUR COMMON STOCK ONLY IN JURISDICTIONS WHERE OFFERS AND SALES ARE PERMITTED. 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 COMMON STOCK.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the various expenses to be incurred in connection with the preparation and filing of this Registration Statement, all of which will be borne by Cytogen Corporation. Cytogen will incur additional expenses in connection with any offering of securities registered hereunder. All amounts shown are estimates except the Securities and Exchange Commission registration fee.

| Securities and Exchange Commission | \$ 8,869 |
|------------------------------------|--------------|
| Legal fees and expenses | \$ 10,000 |
| Accounting fees and expenses | \$ 5,000 |
| Printing | \$ 10,000 |
| Trustee services | \$ 10,000 |
| Miscellaneous | \$ 15,000 |
| Total Expenses | \$ 58,869 |

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Subsection (a) of Section 145 of the Delaware General Corporation Law empowers a corporation to indemnify any person who was or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled

to indemnity for such $\,$ expenses $\,$ which the Court of Chancery or such other court shall deem proper.

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Section 145 further provides that to the extent a director or officer of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsection (a) and (b) or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith; that the indemnification provided by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and that the scope of indemnification extends to directors, officers, employees, or agents of a constituent corporation absorbed in a consolidation or merger and persons serving in that capacity at the request of the constituent corporation for another. Section 145 also empowers a corporation to purchase and maintain insurance on behalf of a director or officer of the corporation against any liability asserted against him or her or incurred by him or her in any such capacity or arising out of his or her status as such whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145.

Section 102(b)(7) of the Delaware General Corporation Law enables a corporation in its certificate of incorporation to limit the personal liability of members of its board of directors for violation of a director's fiduciary duty of care. This section does not, however, limit the liability of a director for breaching his or her duty of loyalty, failing to act in good faith, engaging in intentional misconduct or knowingly violating a law, authorizing a payment of a dividend or approving a stock repurchase in violation of Delaware Corporate Law or from any transaction in which the director derived an improper personal benefit. This section also will have no effect on claims arising under the federal securities laws.

The Company's Certificate of Incorporation and By-Laws provide that the Company shall indemnify officers and directors and, to the extent permitted by the Board of Directors, employees and agents of the Company, to the full extent permitted by and in the manner permissible under the laws of the State of Delaware. In addition, the By-Laws permit the Board of Directors to authorize the Company to purchase and maintain insurance against any director, officer, employee or agent of the Company arising out of his capacity as such.

Cytogen has obtained liability insurance for the benefit of its directors and officers which provides coverage for losses of directors and officers for liabilities arising out of claims against such persons acting as directors or officers of Cytogen (or any subsidiary thereof) due to any breach of duty, neglect, error, misstatement, misleading statement, omission or act done by such directors and officers, except as prohibited by law.

ITEM 16. EXHIBITS AND FINANCIAL SCHEDULES.

(a) Exhibits

- 1.01 Form of Underwriting Agreement **
- 4.01 Form of Senior Indenture **
- 4.02 Form of Subordinated Indenture **
- 4.03 Certificate of Designations of Preferred Stock **

- 4.04 Form of Preferred Stock Certificate **
- 4.05 Form of Warrant **
- 5.01 Opinion of Morgan, Lewis & Bockius LLP*
- 23.01 Consent of KPMG LLP

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- 23.02 Consent of PricewaterhouseCoopers LLP
- 23.03 Consent of Morgan, Lewis & Bockius LLP (Included in Exhibit 5.1)
- 24.01 Power of Attorney (Included on signature page)
- 25.01 Statement of Eligibility of Trustee on Form T-1 **

- * To be filed by amendment.
- ** To be filed, if necessary, by amendment or as an exhibit to be incorporated by reference in the prospectus forming part of this registration statement.

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
 - To reflect in the prospectus any facts or events arising after (ii) the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

PROVIDED, HOWEVER, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the

Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in this Registration Statement.

- (2) That, for the purposes of determining any liability under the Securities Act, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions described herein, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes to supplement to the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transactions by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth in the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.

The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Princeton, State of New Jersey, on November 5, 2004.

CYTOGEN CORPORATION

By: /s/ Michael D. Becker

Michael D. Becker

President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Cytogen Corporation, hereby severally constitute and appoint Michael D. Becker and Christopher P. Schnittker and each of them singly, our true and lawful attorneys with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below, the Registration Statement on Form S-3 filed herewith and any and all pre-effective and post-effective amendments to said Registration Statement and generally to do all such things in our name and behalf in our capacities as officers and directors to enable Cytogen Corporation to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said Registration Statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| SIGNATURE | TITLE |
|--|--|
| /s/ Michael D. Becker Michael D. Becker | President, Chief Executive Officer and Director (Principal Executive Officer) |
| /s/ Christopher P. Schnittker | Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer) |
| /s/ John E. Bagalay, Jr. John E. Bagalay, Jr. | Director |
| /s/ Allen Bloom | |

| Allen Bloom | Director | |
|---------------------------|----------|--|
| /s/ Stephen K. Carter | Director | |
| Stephen K. Carter | DITECTOL | |
| /s/ James A. Grigsby | Director | |
| James A. Grigsby | pilector | |
| /s/ Robert F. Hendrickson | Director | |
| Robert F. Hendrickson | Director | |
| /s/ Kevin G. Lokay | Director | |
| Kevin G. Lokay | 2110001 | |

EXHIBIT INDEX

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^{*} To be filed by amendment.

^{**} To be filed, if necessary, by amendment or as an exhibit to be incorporated by reference in the prospectus forming part of this registration statement.