

CYTOGEN CORP
Form 424B2
October 24, 2002

Filed Pursuant to Rule 424(b)(2)
under the Securities Act of 1933, as
amended (Registration Statement
No. 333-100315)

PROSPECTUS

CYTOGEN CORPORATION

1,276,994 Shares of common stock

This prospectus relates to resales of shares of our common stock, \$0.01 par value per share, previously issued by Cytogen Corporation to the former shareholders and debtholders of Prostagen, Inc. in connection with the execution of an Addendum to Stock Exchange Agreement among Cytogen Corporation and the Shareholders and Debtholders of Prostagen, Inc. dated May 14, 2002, and a subsequent amendment dated August 13, 2002.

We will not receive any proceeds from the sale of the shares.

The selling stockholders identified in this prospectus, or their pledgees, donees, transferees or other successors-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices.

Our common stock is traded on the Nasdaq National Market under the symbol "CYTO." On October 17, 2002, the closing sale price of our common stock on Nasdaq was \$0.41 per share. You are urged to obtain current market quotations for our common stock.

Investing in our common stock involves a high degree of risk. See "Risk Factors" commencing on page 3.

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 October 24, 2002.

TABLE OF CONTENTS

Prospectus Summary.....	2
Cytogen Corporation.....	2
The Offering.....	2

Edgar Filing: CYTOGEN CORP - Form 424B2

Risk Factors.....	3
We Have A History Of Operating Losses And An Accumulated Deficit And Expect To Incur Losses In The Future.....	3
We Are Heavily Dependent On Market Acceptance Of ProstaScint, Quadramet And BrachySeed For Near-Term Revenues.....	3
Our Functional Proteomics Program Is At An Early Stage Of Development.....	4
There Is A Limited Market For Our Potential Functional Proteomics Products.....	5
The Reduced Workforce At AxCell May Not Be Able To Implement AxCell's Business Plan.....	5
We Have Experienced Fluctuating Results Of Operations.....	5
We May Need To Raise Additional Capital Which May Not Be Available.....	6
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.....	6
Our PSMA Product Development Program is Novel And, Consequently, Inherently Risky.....	7
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.....	8
Competition In Our Field Is Intense And Likely To Increase.....	8
We Rely Heavily On Our Collaborative Partners.....	9
Our Business Could Be Harmed If Our Collaborative Arrangements Expire Or Are Terminated Early.....	10
The Termination Of One Or More License Agreements That Are Important In the Manufacture Of Our Current Products And New Product Research And Development Activities Would Harm Our Business.....	10
We Have Limited Sales, Marketing and Distribution Capabilities For Our Products.....	10
There Are Risks Associated With The Manufacture And Supply Of Our Products.....	10
Failure Of Consumers To Obtain Adequate Reimbursement From Third-Party Payers Could Limit Market Acceptance And Affect Pricing Of Our Products.....	11
If We Are Unable To Comply With Applicable Governmental Regulations, We May Not Be Able To Continue Our Operations.....	12
We Could Be Negatively Impacted By Future Interpretation Or Implementation Of Federal And State Fraud And Abuse Laws, Including Anti-Kickback Laws, The Federal State Law And Other Federal And State Anti-Referral Laws....	13
We Depend On Attracting And Retaining Key Personnel.....	14
Our Business Exposes Us To Potential Liability Claims That May Exceed Our Financial Resources, Including Our Insurance Coverage, And May Lead To the Curtailment Or Termination Of Our Operations.....	14

-i-

Our Business Involves Environmental Risks That May Result In Liability....	14
Our Intellectual Property Is Difficult To Protect.....	14
We Cannot Be Certain That Our Security Measures Protect Our Unpatented Proprietary Technology.....	15
We Are Currently Subject To Patent Litigation.....	16
If We Make Any Acquisitions, We Will Incur A Variety Of Costs And May Never Realize The Anticipated Benefits.....	16
Our Stock Price Has Been And May Continue To Be Volatile, And Your Investment In Our Stock Could Decline In Value Or Fluctuate Significantly.....	16
We Have Adopted Various Anti-Takeover Provisions Which May Affect the Market Price Of Our Common Stock.....	17
The Liquidity Of Our Common Stock Could Be Adversely Affected If We Are	

Edgar Filing: CYTOGEN CORP - Form 424B2

Delisted From The Nasdaq National Market.....	17
A Large Number Of Our Shares Are Eligible For Future Sale Which May Adversely Impact The Market Price Of Our Common Stock.....	18
Because We Do Not Intend To Pay Any Cash Dividends On Our Shares Of Common Stock, Our Stockholders Will Not Be Able To Receive A Return On Their Shares Unless They Sell Them.....	20
Special Note Regarding Forward-Looking Statements.....	20
Use of Proceeds.....	21
Selling Stockholders.....	21
Plan of Distribution.....	23
Legal Matters.....	24
Experts.....	24
Where You Can Find More Information.....	25
Information Incorporated By Reference.....	25

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.

-ii-

PROSPECTUS SUMMARY

This summary highlights important features of this offering and the information included or incorporated by reference in this prospectus. This summary does not contain all of the information that you should consider before investing in our common stock. You should read the entire prospectus carefully, especially the risks of investing in our common stock discussed under "Risk Factors."

CYTOGEN CORPORATION

Cytogen Corporation is a biopharmaceutical company with an established and growing product line in prostate cancer and other areas of oncology. Our FDA-approved products include ProstaScint(R) (a monoclonal antibody-based imaging agent used to image the extent and spread of prostate cancer); BrachySeed(TM) I-125 and Pd-103, (uniquely designed, next-generation radioactive seed implants for the treatment of localized prostate cancer); and Quadramet(R) (a therapeutic agent marketed for the relief of bone pain in prostate and other types of cancer). We are evolving a pipeline of oncology product candidates by developing our prostate specific membrane antigen, or PSMA technologies, which we exclusively licensed from Memorial Sloan-Kettering Cancer Center.

AxCell Biosciences Corporation, a subsidiary of Cytogen Corporation, is engaged in the research and development of novel biopharmaceutical products using its portfolio of functional proteomics solutions and collection of proprietary signal transduction pathway information. Through the systematic and industrialized measurement of protein-to-protein interactions, AxCell is assembling ProChart(TM), a proprietary database of signal transduction pathway information that is relevant in a number of therapeutically important classes of molecules including growth factors, receptors and other potential protein therapeutics or drug targets. AxCell's database content and functional proteomics tools are available on a non-exclusive basis to biotechnology,

Edgar Filing: CYTOGEN CORP - Form 424B2

pharmaceutical and academic researchers. AxCell is continuing its research activities to further elucidate the role of novel proteins through both external collaborations and data mining.

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, 3rd Floor, 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.

Cytogen(R), ProstaScint(R), OncoScint(R), Quadramet(R), ProChart(TM) database and the Cytogen and AxCell Biosciences Corporation logos are our marks. All other trademarks, servicemarks or trade names referred to in this prospectus are the property of their respective owners.

THE OFFERING

Common Stock offered by selling stockholders.....	1,276,994 shares
Use of proceeds.....	Cytogen will not receive any proceeds from the sale of shares in this offering
Nasdaq National Market symbol.....	CYTO

-2-

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below before purchasing our common stock. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations. 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 could fall, and you may lose all or part of the money you paid to buy our common stock.

We Have a History of Operating Losses and an Accumulated Deficit and Expect To Incur Losses in the Future.

We have a history of operating losses since our inception. We had a net loss of \$8.2 million for the six months ended June 30, 2002 and had a net loss of \$12.1 million for the year ended December 31, 2001. The \$8.2 million net loss during the six months ended June 30, 2002 included a one-time, non-cash milestone charge of \$2.0 million related to the progress of dendritic cell prostate cancer clinical trials at Northwest Biotherapeutics, Inc. We had a net loss of \$27.3 million for the year ended December 31, 2000 which included one-time, non-cash charges of \$13.1 million for the acquisition of product candidate rights and \$4.3 million for the cumulative effect of an accounting change following the adoption of Securities and Exchange Commission Staff Accounting Bulletin No. 101. We had net income of \$729,000 for the year ended December 31, 1999 which

Edgar Filing: CYTOGEN CORP - Form 424B2

included a \$3.3 million non-operating gain. We had an accumulated deficit of \$348.9 million as of June 30, 2002. In order to develop and commercialize our technologies, particularly our prostate specific membrane antigen, or PSMA, technology, and expand our oncology 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.

Our ability to generate and sustain significant additional revenues or achieve profitability will depend upon the factors discussed elsewhere in this "Risk Factors" Section, as well as numerous other factors outside of our control, including:

- development of competing products that are more effective or less costly than ours;
- our ability to develop and commercialize our own products and technologies; and
- our ability to achieve increased sales for our existing products and sales for any new products.

As a result, we may never be able to generate or sustain significant additional revenue or achieve profitability.

We Are Heavily Dependent On Market Acceptance Of ProstaScint, Quadramet and BrachySeed For Near-Term Revenues.

We expect ProstaScint, BrachySeed and Quadramet and to account for a significant percentage of our product-related revenues in the near future. For the six months ended June 30, 2002, revenues from ProstaScint, BrachySeed and Quadramet accounted for approximately 98% of our product related revenues.

-3-

Because these products contribute the majority of our product-related revenues, our business, financial condition and results of operations depend on their acceptance as safe, effective and cost-efficient alternatives to other available treatment and diagnostic protocols by the medical community, including:

- health care providers, such as hospitals and physicians; and
- third-party payors, including Medicare, Medicaid, private insurance carriers and health maintenance organizations.

Our customers, including technologists and physicians, must successfully complete our Partners in Excellence Program, or PIE 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 on the part of users. We cannot assure you that additional technologists and physicians will make this commitment or otherwise accept this product as part of their treatment practices.

Berlex Laboratories, Inc. markets Quadramet in the United States through an agreement with us entered into in October 1998. We cannot assure you that Berlex will be able to successfully market Quadramet or that this agreement will result in significant revenues for us. We recently obtained marketing rights to Quadramet in Canada, but have not yet implemented a selling program. We cannot assure you that Quadramet can be marketed effectively in Canada, or that it will contribute significantly to our revenues.

Edgar Filing: CYTOGEN CORP - Form 424B2

We cannot assure you that Quadramet will be approved for additional indications, due to uncertainty as to efficacy or safety for other purposes, regulatory obstacles and physician preferences for existing or competing practices.

We cannot assure you that ProstaScint, BrachySeed or Quadramet will achieve additional market acceptance on a timely basis, or at all. If ProstaScint, BrachySeed or Quadramet do not achieve broader market acceptance, we may not be able to generate sufficient revenue to become profitable.

Our Functional Proteomics Program Is At An Early Stage Of Development.

We are developing a functional proteomics program through our subsidiary, AxCell Biosciences Corporation. This technology involves new approaches to drug research and development and remains commercially unproven. Our technology and development focus is primarily directed toward offering an infrastructure to companies for the development of drugs to treat a variety of complex human diseases. There is limited understanding generally relating to the role of proteins in diseases, and few products based on protein interaction discoveries have been developed and commercialized. Even if our proteomics program is successful in identifying and validating biological targets, there is no certainty that we or our customers will be able to develop or commercialize products to improve human health.

Our technology program for proteomics is still in the early stages of development. We may not be able to populate our ProChart with information that is useful to potential customers in a timely manner. Even if we complete and develop successfully our proteomics technology, the technology may not be accepted by, or be useful to, our potential customers.

In addition, the success of our proteomics technology will depend upon our ability to use software tools to generate data that relates protein signaling pathways to a variety of other bioinformatic data. Because of the complexity of this data, we may not be able to detect and remedy any design defects or software errors in our existing or future technologies, including databases.

-4-

We may not be successful in addressing or mitigating these risks and uncertainties, and, if we are not, our business could be significantly and adversely affected.

There Is A Limited Market For Our Potential Functional Proteomics Products.

Due to the specialized nature and anticipated cost of our proteomics technology and services, there are a limited number of pharmaceutical and biotechnology companies that are potential customers. In addition, demand for our functional proteomics technology and services is limited because:

- our potential customers may decide to conduct in-house research rather than subscribe to our ProChart database;
- our competitors may offer similar services at competitive prices;
- we may not be able to service satisfactorily the needs of our potential or actual customers;
- others may publicly disclose or patent proprietary information contained in our ProChart (including information related to protein signaling pathways or target candidates) or relating to prostate antigens or antibodies; and

Edgar Filing: CYTOGEN CORP - Form 424B2

- technological innovations may be discovered that are more advanced than those used by or available to us.

We may not be successful in addressing or mitigating these risks and uncertainties, and, if we are not, our business could be significantly and adversely affected.

The Reduced Workforce At AxCell May Not Be Able To Implement AxCell's Business Plan.

In September 2002, we announced the restructuring of our subsidiary, AxCell Biosciences Corporation, in an effort to reduce expenses and position Cytogen for stronger long-term growth in oncology. As a result, we reduced our staff at AxCell by seventy-five percent, suspended certain projects at AxCell and implemented other cost-saving measures. Although we believe that we have retained the AxCell personnel who are key to achieving AxCell's goals and implementing its strategies, we cannot be certain that such reduced workforce will be able to implement AxCell's current business plan. The further loss of any of AxCell's personnel could have a material adverse effect on AxCell's ability to achieve its goals.

We Have Experienced Fluctuating Results Of Operations.

Our results of operations have fluctuated on an annual and quarterly basis and may fluctuate significantly from period to period in the future, due to, among other factors:

- variations in revenue from sales of and royalties from our products;
- timing of regulatory approvals and other regulatory announcements relating to our products;
- variations in our marketing, manufacturing and distribution channels;
- timing of the acquisition and successful integration of complementary products and technologies;
- timing of new product announcements and introductions by us and our competitors; and

-5-

- product obsolescence resulting from new product introductions by us or our competitors.

Many of these factors are outside our control. Due to one or more of these factors, our results of operations may fall below the expectations of securities analysts and investors in one or more future quarters. If this happens, the market price of our common stock could decline.

We May Need To Raise Additional Capital Which May Not Be Available.

We have incurred negative cash flows from operations since inception. We expended, and will need to continue to expend, substantial funds to complete our planned product development efforts, including our proteomics and PSMA programs. Our future capital requirements and the adequacy of our available funds depend on many factors, including:

- successful commercialization of our products;

Edgar Filing: CYTOGEN CORP - Form 424B2

- acquisition of complementary products and technologies;
- magnitude, scope and results of our product development efforts;
- progress of preclinical studies and clinical trials;
- progress toward regulatory approval for our products;
- costs of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- competing technological and market developments; and
- expansion of strategic alliances for the sale, marketing and distribution of our products.

We may raise additional capital through public or private equity offerings, debt financings or additional collaborations and licensing arrangements. Additional financing may not be available to us when needed, or, if available, we may not be able to obtain financing on terms favorable to us or our stockholders. If we raise additional capital by issuing equity securities, the issuance will result in ownership dilution to our stockholders. 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. If adequate funds are not available, we may not be able to conduct research activities, preclinical studies, clinical trials or other activities relating to the successful commercialization of our products on a timely basis, if at all, with the result that our business could be significantly and adversely affected.

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 been engaged primarily in research directed toward the development, commercialization and marketing of products to improve 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 2001, we launched the iodine version of BrachySeed. In May 2002, we launched the palladium version of BrachySeed. These products have not yet achieved significant commercial success.

-6-

Our PSMA and proteomics technologies are still in the early stages of development. We have only recently begun to incorporate our proteomics technology into commercialized products. We may be unable to continue to successfully develop or commercialize these products and technologies.

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

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

Edgar Filing: CYTOGEN CORP - Form 424B2

- to obtain regulatory approval for the use and sale of our products;
- to manufacture our products in sufficient quantities and at a reasonable cost;
- to develop a sufficient market for our products; and
- 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. If we fail to properly address these risks and attain our business objectives, our business could be significantly and adversely affected.

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:

- the technologies we use will not be effective;
- our product candidates will be unsafe;
- our product candidates will fail to receive the necessary regulatory approvals;
- the product candidates will be hard to manufacture on a large scale or will be uneconomical to market; and
- we will not successfully overcome technological challenges presented by our potential new products.

In 1999, we entered into a joint venture with Progenics Pharmaceuticals, Inc. to develop in vivo immunotherapeutic products utilizing PSMA. The first of these product candidates is a therapeutic prostate cancer vaccine utilizing the PSMA gene and a vector delivery system and the PSMA protein as a basis of immune stimulation. We are also developing through this venture an antibody-based immunotherapy for prostate cancer. The joint venture is owned equally by Progenics and us. We have exclusively licensed to the joint venture certain immunotherapeutic applications of our PSMA patent rights and know-how. Progenics has funded the first \$3 million of pre-clinical development costs of the program. Beginning in December 2001, Cytogen and Progenics began to equally share the costs of the Joint Venture. Since that date, we have recognized 50% of

-7-

the Joint Venture's operating results, which, during the first six months of 2002 was a loss of approximately \$1.1 million. We expect our share of losses in the PSMA Development Co. LLC to continue at even higher levels in subsequent periods.

To our knowledge, no therapeutic cancer vaccine has been demonstrated effective or approved for marketing. 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. We cannot assure you that any products will be

Edgar Filing: CYTOGEN CORP - Form 424B2

successfully developed from our PSMA technology. If we fail to develop such products for the reasons set forth above or for any other reason, our business could be significantly and adversely affected.

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. We cannot assure you that the product candidates we develop, pursue or offer will prove to be safe and effective, will receive the necessary regulatory approvals, will not be precluded by proprietary rights of third parties or will ultimately achieve market acceptance. These product candidates will require substantial additional investment, laboratory development, clinical testing and regulatory approvals prior to their commercialization. We cannot assure you that we will not experience difficulties 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 efficacious for use in each target indication. The results from preclinical studies and early clinical trials may not be predictive of results that will be obtained in large-scale testing. We cannot assure you that our clinical trials will demonstrate the safety and efficacy of any products or will result in marketable products. A number of companies in the biotechnology 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, as we develop diagnostic or therapeutic products internally, we will have to make significant investments in diagnostic or therapeutic 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 current Good Manufacturing Practices, or cGMP, of the FDA. We also 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 could be significantly and adversely affected.

Competition In Our Field Is Intense And Likely To Increase.

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

- pharmaceutical companies;
- biotechnology companies;

Edgar Filing: CYTOGEN CORP - Form 424B2

- bioinformatics companies;
- diagnostic companies;
- academic and research institutions; and
- government agencies.

All of our lines of business 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.

Before we recover development expenses for our products and technologies, the products or technologies may become obsolete as a result of technological developments by us or others. 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.

We Rely Heavily On Our Collaborative Partners.

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

- license from The Dow Chemical Company relating to the Quadramet technology;
- sub-license and marketing agreement with Berlex Laboratories, Inc. relating to the Quadramet technology which we licensed from The Dow Chemical Company;
- agreement for manufacture of Quadramet by The DuPont Pharmaceuticals Company (formerly the radiopharmaceuticals division of The DuPont Merck Company);
- marketing and platform development agreement with InforMax, Inc. related to our proteomics program;
- joint venture with Progenics Pharmaceuticals for the development of PSMA for in vivo immunotherapy for prostate and other cancers;
- licensing agreement with Molecular Staging for technology to be used in developing in vitro diagnostic tests using PSMA and prostate specific antigen, or PSA;
- marketing and distribution agreement with Draxis Health, Inc. and its subsidiary, Draximage, Inc. to market and distribute BrachySeed; and
- marketing, license and supply agreements with Advanced Magnetics, Inc. related to our oncology product line for products currently subject to regulatory approval.

Because our collaborative partners are responsible for certain of our sales, marketing, manufacturing and distribution activities, these activities are outside our direct control. We cannot assure you that our partners will perform their obligations under these agreements with us. In the event that our collaborative partners do not successfully market and sell our products or

breach their obligations under our agreements, our products may not be commercially successful, any success may be delayed and new product development could be inhibited with the result that our business could be significantly and adversely affected.

Our Business Could Be Harmed If Our Collaborative Arrangements Expire Or Are Terminated Early.

We cannot assure you that we will be able to maintain our existing collaborative arrangements. If they expire or are terminated, we cannot assure you that they will be renewed or that new arrangements will be available on acceptable terms, if at all. In addition, we cannot assure you that any new arrangements or renewals of existing arrangements will be successful, that the parties to any new or renewed agreements will perform adequately or that any former or potential collaborators will not compete with us.

We cannot assure you that our existing or future collaborations will lead to the development of product candidates or technologies with commercial potential, that we will be able to obtain proprietary rights or licenses for proprietary rights for our product candidates or technologies developed in connection with these arrangements or that we will be able to ensure the confidentiality of proprietary rights and information developed in such arrangements or prevent the public disclosure thereof.

The Termination Of One Or More License Agreements That Are Important In The Manufacture Of Our Current Products And New Product Research And Development Activities Would Harm Our Business.

We are a party to license agreements under which we have rights to use technologies owned by other companies in the manufacture of our products and in our proprietary research, development and testing processes. We are the exclusive licensee of certain patents and patent applications held by the University of North Carolina at Chapel Hill covering part of the technology used in the proteomics program and of certain patents and patent applications held by the Memorial Sloan-Kettering Institute covering PSMA. We also depend upon the enforceability of our license with The Dow Chemical Company with respect to Quadramet. If the licenses were terminated, we may not be able to find suitable alternatives to this technology on a timely basis or on reasonable terms, if at all. The loss of the right to use these technologies that we have licensed would significantly and adversely affect our business.

We Have Limited Sales, Marketing And Distribution Capabilities For Our Products.

We have only recently established a sales force and have limited internal sales, marketing and distribution capabilities for our products. We depend on Berlex Laboratories, Inc. for the sale, marketing and distribution of Quadramet in the United States. In locations outside the United States, we have not established a selling presence. If we are unable to establish and maintain significant sales, marketing and distribution efforts, either internally or through arrangements with third parties, our business may be significantly and adversely affected.

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 through third-party manufacturers in compliance with regulatory requirements and at costs acceptable to us. We cannot assure you that we will be able to arrange for the manufacture of our products on commercially reasonable terms. If we are

Edgar Filing: CYTOGEN CORP - Form 424B2

unable to successfully arrange for the manufacture of our products and product candidates, we will not be able to successfully commercialize our products and our business will be significantly and adversely affected.

-10-

ProstaScint was manufactured at a cGMP compliant manufacturing facility operated by Purdue. We had access to Purdue's facility for continued manufacturing of the product until January 2002. We have built our inventory of ProstaScint to meet our product requirements in the short term. We entered into a Development and Manufacturing Agreement with DSM in July 2000 which we intend will replace our arrangement with Purdue with respect to ProstaScint. Notwithstanding the parties obligations to perform under the agreement with DSM or to negotiate a supply agreement in good faith, we cannot be certain that DSM will satisfactorily perform its obligations thereunder or that the parties will be able to negotiate a supply agreement on commercially reasonable terms, if at all. Our failure to negotiate a long term supply agreement on commercially reasonable terms will have a material adverse effect on our business, financial condition and results of operations.

Quadramet is manufactured by DuPont pursuant to an agreement with both Berlex and Cytogen. Some components of Quadramet, particularly Samarium153 and EDTMP, are provided to DuPont by outside suppliers. Due to radioactive decay, Samarium153 must be produced on a weekly basis. DuPont obtains its requirements for Samarium153 from one supplier. Alternative sources for these components may not be readily available. If DuPont 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 could have a material adverse effect on our business, financial condition and results of operations.

We rely on Draxis as the sole supplier of BrachySeed. If Draxis fails to or is unable to timely supply BrachySeed, we could experience a material adverse effect on our business, financial condition and results of operations.

We and our third-party manufacturers are required to adhere to United States Food & Drug Administration 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 are 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 third-party manufacturers 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 premarket clearance or premarket 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.

Failure Of Consumers To Obtain Adequate Reimbursement From Third-Party Payors Could Limit Market Acceptance And Affect Pricing Of Our Products.

Our business, financial condition and results of operations will continue to be affected by the efforts of governments and other 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 implement government control of pricing and profitability of therapeutic and diagnostic imaging agents such as our products. In addition, an emphasis on managed care increases possible pressure on pricing of these products. While we cannot predict whether these legislative or regulatory proposals will be adopted, or

Edgar Filing: CYTOGEN CORP - Form 424B2

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.

Sales of our products depend in part on reimbursement to the consumer from third-party payors, including Medicare, Medicaid and private health insurance plans. Third-party payors are increasingly challenging the prices charged for

-11-

medical products and services. We cannot assure you that our products will be considered cost-effective and that reimbursement to consumers will continue to be available, or will be sufficient to allow us to sell our products on a competitive basis. Approval of our products for reimbursement by a third-party payor may depend on a number of factors, including the payor's determination that our products are clinically useful and cost-effective, medically necessary and not experimental or investigational. Reimbursement is determined by each payor individually and in specific cases. The reimbursement process can be time consuming. If we cannot secure adequate third-party reimbursement for our products, our business could be significantly and adversely affected.

If We Are Unable To Comply With Applicable Governmental Regulations, We May Not Be Able To Continue Our Operations.

Any products tested, manufactured or distributed by us or on our behalf pursuant to FDA clearances or 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 of clearances or approvals, restrictions on or injunctions against marketing our products based on our technology, and civil and criminal penalties. We cannot assure you that we will not be required to incur significant costs to comply with laws and regulations in the future or that laws or regulations will not 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 drug development and regulatory approval process is lengthy, expensive, uncertain and subject to delays.

The regulatory risks we face also include the following:

- any compound or agent we or our collaborative partners develop must receive regulatory agency approval before it may be marketed as a drug in a particular country;
- 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;
- in all circumstances, approval of the use of previously unapproved radioisotopes in certain of our products requires approval of either

Edgar Filing: CYTOGEN CORP - Form 424B2

the Nuclear Regulatory Commission or equivalent state regulatory agencies. 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. We cannot assure you that such approvals will be obtained on a timely basis, or at all;

- data obtained from preclinical and clinical activities are susceptible to varying interpretations which could delay, limit or prevent regulatory agency approval; and
- delays or rejections may be encountered based upon changes in regulatory agency policy during the period of drug development and/or the period of review of any application for regulatory agency approval.

-12-

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.

We cannot assure you that, even after this time and expenditure, regulatory agency approvals will be obtained for any compound or agent developed by or in collaboration with us. Moreover, regulatory agency approval for a drug or agent may entail limitations on the indicated uses that could limit the potential market for any such drug. Furthermore, if and when such approval is obtained, the marketing, manufacture, labeling, storage 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. Failure to comply with regulatory requirements could result in fines, suspension of regulatory approvals, operating restrictions and criminal prosecution.

The United States Food, Drug and Cosmetics Act requires (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 manufacturing partners do not comply with cGMP we may be subject to sanctions, including fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, failure of the government to grant premarket clearance or premarket approval for drugs, withdrawal of marketing approvals and criminal prosecution.

We Could Be Negatively Impacted By Future Interpretation Or Implementation Of Federal And State Fraud And Abuse Laws, Including Anti-Kickback Laws, The Federal Stark Law And Other Federal And State Anti-referral Laws.

We are subject to various federal and state laws pertaining to health care fraud and abuse, including anti-kickback laws and physician self-referral laws. 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 health care programs, including Medicare, Medicaid and Veterans Administration health programs. 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

Edgar Filing: CYTOGEN CORP - Form 424B2

compliance with these laws. Health care fraud and abuse regulations are complex and even minor, inadvertent irregularities in submissions can potentially give rise to claims that the statute 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.

We could become subject to false claims litigation under federal statutes, which can lead to civil money penalties, criminal fines and imprisonment, and/or exclusion from participation in Medicare, Medicaid and other federal and state health care programs. These false claims statutes include the False Claims Act, which allows any person to bring suit alleging false or fraudulent Medicare or Medicaid claims or other violations of the statute and to share in any amounts paid by the entity to the government in fines or settlement. Such suits, known as qui tam actions, have increased significantly in recent years and have increased the risk that a health care company will have to defend a false claim action, pay fines or be excluded from the Medicare program, Medicaid programs or other federal and state health care programs as a result of an investigation arising out of such action. We cannot assure you that we will not become subject to such litigation or, if we are not successful in defending against such actions, that such actions will not have a material adverse effect on our business, financial condition and results of operations.

-13-

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 we cannot assure you that we will be able to retain existing personnel or attract and retain additional highly qualified employees in the future.

We have an employee retention agreement with our President and Chief Executive Officer, H. Joseph Reiser, Ph.D., which provides for vesting of stock options for the purchase of shares of our common stock based on continued employment and on the achievement of performance objectives defined by the board of directors. We do not have similar retention agreements with its other key personnel. If we are unable to hire and retain personnel in key positions, our business could be significantly and adversely affected unless qualified replacements can be found.

Our Business Exposes Us To Potential 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. We cannot assure you that product liability claims will not be asserted against us, our collaborators or our licensees. While we currently maintain product liability insurance in amounts we believe are adequate, we cannot assure you that such coverage will be adequate to protect us against future product liability claims or that product liability insurance will be available to us in the future on commercially reasonable terms, if at all. Furthermore, we cannot assure you that we will be able to avoid significant product liability claims and adverse publicity. If liability claims against us exceed our financial resources we may have to curtail or terminate our operations.

Edgar Filing: CYTOGEN CORP - Form 424B2

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.

Our Intellectual Property Is Difficult To Protect.

Our business and competitive positions are dependent upon our ability to protect our proprietary technology. Because of the substantial length of time and expense associated with 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 our technology for diagnostic and therapeutic products and the methods for its production and use.

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

- there is no guarantee that any of our pending patent applications will result in issued patents;

-14-

- we may develop additional proprietary technologies that are not patentable;
- there is no guarantee that any patents issued to us, our collaborators or our licensors will provide a basis for a commercially viable product;
- there is no guarantee that any patents issued to us or our collaborators will provide us with any competitive advantage;
- there is no guarantee that any patents issued to us or our collaborators will not be challenged, circumvented or invalidated by third parties; and
- 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, and we cannot assure you as to the degree of protection that will be afforded any patents we are issued or license from others. Furthermore, we cannot assure you that others will not independently develop similar or alternative technologies, duplicate any of our technologies, or, if patents are issued to us, design around the patented technologies developed by us. In addition, 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. We cannot assure you that, if challenged by others in litigation, the patents we have been issued, or which have been assigned or have been licensed from others will not be found invalid. We cannot assure you that our activities would not 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

Edgar Filing: CYTOGEN CORP - Form 424B2

diversion of substantial financial, managerial and other resources. An adverse outcome could:

- subject us to significant liability to third parties;
- require us to cease any related research and development activities and product sales; or
- require us to obtain licenses from third parties.

We cannot assure you that any licenses required under any such third-party patents or proprietary rights would be made 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 us or our competitors' pending patent applications will result in the issuance of valid patents which may significantly and adversely affect our business.

We Cannot Be Certain That Our Security Measures 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. We cannot assure you, however, that these agreements will provide adequate protection for our trade secrets, know-how or other proprietary information or prevent any unauthorized use or disclosure.

-15-

We Are Currently Subject To Patent Litigation.

We are a defendant in a lawsuit filed against us in the United States Federal Court for the District of New Jersey by M. David Goldenberg and Immunomedics, Inc. This lawsuit was filed on March 16, 2000. The litigation claims that our ProstaScint product infringes a patent purportedly owned by Dr. Goldenberg and licensed to Immunomedics. The patent sought to be enforced in the litigation has now expired. As a result, the claim, even if successful, would not result in a bar of the continued sale of ProstaScint or affect any other of our products or technology. However, given the uncertainty associated with litigation, we cannot give any assurance that the litigation will not result in a material expenditure to us.

If We Make Any Acquisitions, We Will Incur A Variety Of Costs And May Never Realize The Anticipated Benefits.

If appropriate opportunities become available, we may attempt to acquire businesses, technologies, services or products that we believe are a strategic fit with our business. We currently have no commitments or agreements with respect to any acquisitions. If, however, we do undertake any transaction of this sort, the process of integrating an acquired business, technology, service or product may result in operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of our business. Moreover, we may never realize the anticipated benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent

Edgar Filing: CYTOGEN CORP - Form 424B2

liabilities and amortization expenses related to intangible assets. These factors could adversely affect our results of operations and financial condition, which could cause a decline in the market price of our common stock.

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:

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

-16-

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.

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 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

Edgar Filing: CYTOGEN CORP - Form 424B2

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.

The Liquidity Of Our Common Stock Could Be Adversely Affected If We Are Delisted From The Nasdaq National Market.

On August 14, 2002, we announced that we had received notification from the Nasdaq Stock Market, Inc. that our common stock had closed below the minimum \$1.00 per share requirement for the previous 30 consecutive trading days as required under Marketplace Rule 4450(a)(5). In accordance with Marketplace Rule 4450 (e)(2), we were provided with 90 calendar days, or until November 12, 2002, to regain compliance by having the bid price for our common stock close at \$1.00 or greater for a minimum period of 10 consecutive trading days.

On September 26, 2002, we announced that our Board of Directors unanimously approved and recommended to our stockholders a proposal that would give the Board of Directors authority to effect a reverse stock split of our common stock, at a ratio of up to one-for-ten at any time prior to December 31, 2002. A

-17-

special meeting of our stockholders will be held on October 25, 2002 to consider such recommendation. We believe the ability to effect a reverse stock split is in the best interests of the Company and our stockholders and will help increase the market price of our common stock above the minimum bid requirement of \$1.00 per share required by Nasdaq. We cannot be certain, however, that our stockholders will grant the Board of Directors authority to effect such reverse stock split, or that even if such authority is granted and we do effect a reverse stock split, that the market price per share of our common stock will increase as we anticipate.

In the event that we are unable to regain or 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. If we are unable to comply with the minimum bid price requirement on or before November 12, 2002, the Nasdaq staff will provide us with written notification that our common stock will be delisted from the Nasdaq National Market. At that time, we may appeal Nasdaq's determination to a Listing Qualifications Panel.

Alternatively, we may submit an application to transfer the listing of our common stock to the Nasdaq SmallCap Market. If such application is submitted and approved, we will be afforded an additional 90-day grace period which will

Edgar Filing: CYTOGEN CORP - Form 424B2

extend the delisting determination until February 11, 2003. We may also be eligible for an additional 180-day grace period which will extend the delisting determination until August 10, 2003 provided that we meet the initial listing criteria for the Nasdaq SmallCap Market under Marketplace Rule 4310(c)(2)(A). The Nasdaq SmallCap Market also has a \$1.00 minimum bid price requirement.

We have not yet determined whether to voluntarily transfer the listing of our common stock to the Nasdaq SmallCap Market. If we so decide and submit the necessary transfer application, there can be no assurance that Nasdaq will approve our application or that if approved we will remain compliant with the applicable continued listing requirements.

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.

Delisting from Nasdaq will 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, which may adversely affect the market price of our common stock. As of September 24, 2002 we had 87,561,469 shares of common stock outstanding, which number of shares: (i) includes an aggregate of 2,417 shares of common stock to be issued

-18-

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 500,000 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 346,446 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. An additional 4,813,752 shares of common stock are issuable upon the exercise of outstanding stock options and an additional 323,630 shares of common stock are issuable upon the exercise of outstanding warrants. Substantially all of such shares subject to outstanding options and warrants will, when issued upon exercise thereof, be available for immediate resale in the public market pursuant to either a currently effective registration statement under the Securities Act of 1933, as amended, or pursuant to Rule 144 or Rule 701 promulgated thereunder. In addition, there are 1,098,082 additional shares of

Edgar Filing: CYTOGEN CORP - Form 424B2

common stock reserved for future issuance under our current stock options plans, 75,699 additional shares of common stock reserved for issuance under our 401(k) Plan and 227,518 additional shares of common stock reserved for the future issuance under our employee bonus plan. All such reserved shares have been registered with the Securities and Exchange Commission pursuant to currently effective Registration Statements. In addition, there are 930,286 additional shares of common stock, subject to certain adjustments, reserved for future issuance in connection with the issuance of a convertible promissory note, having a seven (7) year maturity, to ELAN Corporation, plc in August 1998.

In connection with our acquisition of Prostagin, Inc. in June 1999, we issued 2,050,000 unregistered shares of our common stock to the then stockholders of Prostagin, which shares may be sold from time to time pursuant to Rule 144 under the Securities Act. Such stockholders also have certain piggyback registration rights with respect to these shares of common stock. An additional 1,276,994 shares have been issued in 2002 and another \$2.0 million worth of Cytogen common stock may be issued if certain milestones are achieved in the PSMA development programs.

In addition, on March 28, 2000, we filed with the Securities and Exchange Commission a shelf registration statement on Form S-3 covering six million (6,000,000) shares of our common stock. 1,500,000 of such registered shares were issued to Advanced Magnetics, Inc. in connection with the parties entering into a License and Marketing Agreement in August 2000. An additional 500,000 of the shares registered on that Form S-3 are currently being held in escrow and may be released to Advanced Magnetics in the future in accordance with the terms of such License and Marketing Agreement. An additional 902,601 of the shares registered on that form S-3 were issued to Acqua Wellington North American Equities Fund, Ltd. on September 29, 2000 in a private offering transaction. An additional 1,276,557 of the shares registered on that Form S-3 were issued to Acqua Wellington on February 5, 2001 pursuant to an equity financing facility with Acqua Wellington that was subsequently terminated. An additional 1,820,000 of the shares registered on that Form S-3 were issued to the State of Wisconsin Investment Board on June 19, 2001 in a private offering transaction. We are contractually obligated to maintain the effectiveness of such registration statement.

On October 25, 2001, we filed with the Securities and Exchange Commission a shelf registration statement on Form S-3 covering ten million (10,000,000) shares of our common stock. 2,970,665 and 4,166,700 of such registered shares were issued to the State of Wisconsin Investment Board in private offering transactions in each of January 2002 and June 2002, respectively.

Availability of a significant number of additional shares of our common stock could depress the price of our common stock.

-19-

Because We Do Not Intend to Pay Any Cash Dividends On Our Shares of Common Stock, Our Stockholders Will Not Be Able to Receive a Return on Their Shares Unless 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. Unless we pay dividends, our stockholders will not be able to receive a return on their shares unless they sell them.

Edgar Filing: CYTOGEN CORP - Form 424B2

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes or incorporates forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical facts, included or incorporated in this prospectus regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included or incorporated in this prospectus, particularly under the heading "Risk Factors", that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements.

You should not unduly rely on forward-looking statements contained or incorporated by reference in this prospectus. Actual results or outcomes may differ materially from those predicted in our forward-looking statements due to the risks and uncertainties inherent in our business, including among other items, risks and uncertainties in:

- our ability to successfully execute our business model;
- our ability to compete successfully against direct and indirect competitors;
- our ability to launch our proteomics program successfully;
- market acceptance of and continuing demand for our products, including programs designed to facilitate use of the products, such as the Partners in Excellence or PIE Program;
- the timing and results of clinical studies and regulatory approvals;
- demonstration over time of the efficacy and safety of our products;
- our ability to develop new products;
- the degree of competition from existing or new products;
- success in obtaining marketing approvals for our products in Canada and Europe;

-20-

- our ability to protect our intellectual property, including patents and know-how;
- our ability to access the capital markets in the near term and in the future to support our operations and for continued funding of existing projects and for the pursuit of new projects;

Edgar Filing: CYTOGEN CORP - Form 424B2

- the ability to attract and retain personnel needed for business operations and strategic plans;
- the decision by the majority of public and private insurance carriers on whether to reimburse patients for our products;
- the ability to attract and maintain, and the ultimate success of, strategic partnering arrangements, collaborations, and acquisition candidates; and
- changing market conditions and shifts in the regulatory environment.

You should read and interpret any forward-looking statements together with the following documents:

- our most recent Annual Report on Form 10-K;
- the risk factors contained in this prospectus under the caption "Risk Factors"; and
- 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 not receive any proceeds from the sale of shares by the selling stockholders.

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

In connection with our acquisition of Prostagin, Inc. in June 1999, we entered into a Stock Exchange Agreement with the stockholders and debtholders of Prostagin, Inc., collectively referred to herein as the "Prostagin Partners." Pursuant to the Stock Exchange Agreement, we became obligated to pay certain amounts to the Prostagin Partners in both shares of our common stock and cash.

On May 14, 2002, we entered into an Addendum to the Stock Exchange Agreement with the Prostagin Partners. Pursuant to such Addendum, our obligations to make certain payments under the Stock Exchange Agreement have been clarified and the shares registered hereunder have been issued in

-21-

accordance with the Stock Exchange Agreement as clarified by such Addendum. The Addendum was subsequently amended on August 13, 2002.

The following table sets forth, to our knowledge, certain information

Edgar Filing: CYTOGEN CORP - Form 424B2

about the selling stockholders as of September 6, 2002.

Beneficial ownership is determined in accordance with the rules of the SEC, and includes voting or investment power with respect to shares. Shares of common stock issuable under stock options that are exercisable within 60 days after September 10, 2002 are deemed outstanding for computing the percentage ownership of the person holding the options but are not deemed outstanding for computing the percentage ownership of any other person. Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except to the extent authority is shared by spouses under applicable law. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for the person named below.

Name of Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to Offering (1)		Number of Shares of Common Stock Being Offered(1)	Shares to be Be Afte
	Number	Percentage (2)		
Misrock Holdings, L.P.....	363,498	*	363,498	0
C.C. Consulting A/S.....	261,718	*	261,718	0
Barbara G. Misrock (3).....	618,472	*	572,872	45,600
Michael Ian Sherman.....	139,807	*	139,807	0
FoxKiser Development Partners.....	162,112	*	162,112	0
New Hope Holdings, LP (4).....	238,159	*	58,159	180,000
Max Link.....	52,344	*	52,344	0
Gerard Klauer Mattison & Co., Inc. (5).....	49,982	*	29,982	20,000

* Less than one percent.

(1) We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders might not sell any or all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders.

(2) Applicable percentage ownership is based on 87,561,469 shares of common stock outstanding as of September 24, 2002, plus any common stock equivalent or convertible securities held or shares beneficially owned by each such holder.

Edgar Filing: CYTOGEN CORP - Form 424B2

- (3) Barbara G. Misrock is general partner of Misrock Holdings, L.P., and, as such has the power to vote or direct the vote of and to dispose of or direct the disposition of the shares owned by Misrock Holdings,

-22-

L.P. Ms. Misrock expressly disclaims beneficial ownership of such shares, except as to her proportionate interest in Misrock Holdings, L.P. Includes 254,974 shares of common stock held by Ms. Misrock in her individual capacity.

- (4) Includes 180,000 shares of common stock otherwise held by New Hope Holdings, LP.
- (5) Includes 20,000 shares of common stock otherwise held by Gerard Klauer Mattison & Co., Inc.

PLAN OF DISTRIBUTION

The shares covered by this prospectus may be offered and sold from time to time by the selling stockholders. The term "selling stockholders" includes donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other non-sale related transfer. The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. Such sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices and under terms then prevailing or at prices related to the then current market price or in negotiated transactions. The selling stockholders may sell their shares by one or more of, or a combination of, the following methods:

- purchases by a broker-dealer as principal and resale by such broker-dealer for its own account pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- block trades in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- an over-the-counter distribution in accordance with the rules of the Nasdaq National Market;
- in privately negotiated transactions; and
- in options transactions.

In addition, any shares that qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this prospectus.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. In connection with distributions of the shares or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions. In connection with such transactions, broker-dealers or other financial institutions may engage in short sales of the common stock in the course of hedging the positions they assume with selling stockholders. The selling stockholders may also sell the common stock short and redeliver the shares to close out such short positions. The selling stockholders may also

Edgar Filing: CYTOGEN CORP - Form 424B2

enter into option or other transactions with broker-dealers or other financial institutions which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). The selling stockholders may also pledge shares to a broker-dealer or other financial institution, and, upon a default, such broker-dealer or other financial institution, may effect sales of the pledged shares pursuant to this prospectus (as supplemented or amended to reflect such transaction).

-23-

In effecting sales, broker-dealers or agents engaged by the selling stockholders may arrange for other broker-dealers to participate. Broker-dealers or agents may receive commissions, discounts or concessions from the selling stockholders in amounts to be negotiated immediately prior to the sale.

In offering the shares covered by this prospectus, the selling stockholders and any broker-dealers who execute sales for the selling stockholders may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. Any profits realized by the selling stockholders and the compensation of any broker-dealer may be deemed to be underwriting discounts and commissions.

In order to comply with the securities laws of certain states, if applicable, the shares must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, we will make copies of this prospectus available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

At the time a particular offer of shares is made, if required, a prospectus supplement will be distributed that will set forth the number of shares being offered and the terms of the offering, including the name of any underwriter, dealer or agent, the purchase price paid by any underwriter, any discount, commission and other item constituting compensation, any discount, commission or concession allowed or reallocated or paid to any dealer, and the proposed selling price to the public.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon by Hale and Dorr LLP, Princeton, New Jersey.

EXPERTS

Edgar Filing: CYTOGEN CORP - Form 424B2

The consolidated balance sheets of Cytogen Corporation (the "Company") as of December 31, 2001 and 2000 and the consolidated statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2001, 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 the Company. Such financial statements 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 and is relying solely upon the manually-signed report of Arthur Andersen LLP previously provided to the Company on February 5, 2002 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 Andersen has not consented to the inclusion of

-24-

their report in this prospectus, you will not be able to recover against 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 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, 2001, as filed with the Securities and Exchange Commission on March 28, 2002;
- (2) Our Current Report on Form 8-K dated January 18, 2002, as filed with the Securities and Exchange Commission on January 24, 2002;

Edgar Filing: CYTOGEN CORP - Form 424B2

- (3) Our Quarterly Report on Form 10-Q for the period ended March 31, 2002, as filed with the Securities and Exchange Commission on May 14, 2002;
- (4) Our Current Report on Form 8-K dated May 20, 2002, as filed with the Securities and Exchange Commission on May 20, 2002, as amended on Form 8-K/A dated May 20, 2002, as filed with the Securities and Exchange Commission on May 22, 2002;
- (5) Our Current Report on Form 8-K dated May 24, 2002, as filed with the Securities and Exchange Commission on May 24, 2002;
- (6) Our Current Report on Form 8-K dated May 29, 2002, as filed with the Securities and Exchange Commission on May 31, 2002;
- (7) Our Current Report on Form 8-K dated June 4, 2002, as filed with the Securities and Exchange Commission on June 4, 2002;

-25-

- (8) Our Annual Report on Form 11-K for the period ended December 31, 2001 as filed with the Securities and Exchange Commission on June 27, 2002.
- (9) Our Quarterly Report on Form 10-Q for the period ended June 30, 2002, as filed with the Securities and Exchange Commission on August 14, 2002;
- (10) Our Current Report on Form 8-K dated August 14, 2002, as filed with the Securities and Exchange Commission on August 19, 2002;
- (11) Our Current Report on Form 8-K dated September 16, 2002, as filed with the Securities and Exchange Commission on September 17, 2002;
- (12) 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;
- (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; 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: Lawrence R. Hoffman, Esq.
Vice President and Chief Financial Officer
Telephone: 609-750-8200

You should rely on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized

Edgar Filing: CYTOGEN CORP - Form 424B2

anyone else to provide you with different information. We are not making an offer of these securities in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of these documents.

-26-