CYTOGEN CORP
Form S-3
October 25, 2001

As filed with the Securities and Exchange Commission on October 25, 2001
Registration Statement No. 333-

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

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

CYTOGEN CORPORATION
(Exact Name of Registrant as Specified in Its Charter)

Delaware	22-2322400
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)

600 College Road East, CN5308
Princeton, New Jersey 08540
(609) 750-8200
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Catherine M. Verna, Esq.
Vice President and General Counsel
Cytogen Corporation
600 College Road East, CN5308
Princeton, New Jersey 08540
(609) 750-8220
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copy to:
Richard S. Mattessich, Esq.
Hale and Dorr LLP
650 College Road East
Princeton, New Jersey 08540
(609) 750-7600

Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. | |

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest

reinvestment plans, check the following box. |X|

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. | | .

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. | |

CALCULATION OF REGISTRATION FEE

Title of Shares to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common stock, $.01 par value per share.....	10,000,000	$2.50	$25,000,000	$6,250

(1) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act and based upon the average of the high and low prices on the Nasdaq National Market on October 22, 2001.

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

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

Subject to completion, dated October 25, 2001

PROSPECTUS

CYTOGEN CORPORATION

10,000,000 Shares of common stock

This is a public offering of shares of the common stock of Cytogen Corporation. This means that from time to time:

- we may offer and issue shares of common stock in varying amounts and at prices and on terms to be determined at the time of sale;
- we will provide a prospectus supplement each time we sell such common stock; and
- the prospectus supplement will describe the offering and the terms of each such sale.

We will receive all of the proceeds from such sales.

We may offer the securities directly or through agents or to or through underwriters or dealers. If any agents or underwriters are involved in the sale of the securities, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth, or will be calculable from the information set forth, in an accompanying prospectus supplement. We can sell the securities through agents, underwriters or dealers only with delivery of a prospectus supplement describing the method and terms of the offering of such securities. See "Plan of Distribution."

Our common stock is traded on the Nasdaq National Market under the symbol "CYTO."

THE SECURITIES OFFERED INVOLVE A HIGH DEGREE OF RISK. SEE "RISK FACTORS" COMMENCING ON PAGE 4 FOR A DISCUSSION OF SOME IMPORTANT RISKS YOU SHOULD CONSIDER BEFORE BUYING ANY SHARES OF OUR COMMON STOCK.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES, OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is October 25, 2001.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission using a "shelf" registration or continuous offering process. We may from time to time sell the shares of common stock set forth in this prospectus in one or more offerings up to an aggregate of 10,000,000 shares of common stock.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities we will provide you with a prospectus supplement containing specific information about the terms of each such sale. The prospectus supplement also may add, update or change information in this prospectus. If there is any inconsistency between the information in the prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement. You should read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information" beginning on page 23 of this prospectus.

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

You should rely only on the information contained in this prospectus or in a prospectus supplement or amendment. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. We may offer to sell, and seek offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus or a prospectus supplement or amendment or incorporated herein by reference is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

CYTOGEN CORPORATION

Cytogen Corporation is a biopharmaceutical company with an established and growing product line in prostate cancer and other areas of oncology. We maintain a leadership position in proteomics research designed to accelerate drug

discovery and development. In 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) (a uniquely designed next-generation radioactive seed implant for the treatment of localized prostate cancer), Quadramet(R) (a therapeutic agent marketed for the relief of bone pain in prostate and other types of cancer) and OncoScint CR/OV(R) (a monoclonal antibody-based imaging agent for colorectal and ovarian cancer). We are evolving a pipeline of oncology product candidates by exploiting our prostate specific membrane antigen, or PSMA, technologies, which are exclusively licensed from Memorial Sloan-Kettering Cancer Center. AxCell BioSciences, our subsidiary, is a leader in the effort to chart protein-signaling pathways for use in accelerating drug discovery and development. In conjunction with InforMax, Inc., AxCell intends to market its ProChart(TM) database of protein interactions as a discovery and development tool for subscribers in the pharmaceutical, biotechnology and agricultural industries. In addition, we plan to use AxCell's proteomics technology to research and develop novel drug targets independently or via collaborative ventures.

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.

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 principal executive offices are located at 600 College Road East, CN 5308, Princeton, New Jersey 08540-5308 and our telephone number is (609) 750-8200. Our web site is http://www.cytogen.com. The information found in our web site is not part of or incorporated by reference in this prospectus.

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. For the first six months of 2001, we had a net loss of $5.7 million. We had a net loss of $27.3 million for the year ended December 31, 2000 which included one-time, non-cash charges of $13.2 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 included a $3.3 million non-operating gain and we had a net loss of $13.2 million for the year ended December 31, 1998. The Company had an accumulated deficit of $334.3 million as of June 30, 2001. In order to develop and

commercialize our technologies, particularly our proteomics program and 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 may 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 and Quadramet to account for a significant percentage of our product-related revenues in the near future. For the first six months of 2001 and for the year ended December 31, 2000, revenues from ProstaScint and Quadramet collectively accounted for approximately 94% and 95%, respectively, of our product related revenues.

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.

We cannot assure you that Quadramet will be approved for additional indications, due to uncertainty as to its 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 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 PROTEOMICS PROGRAM IS AT AN EARLY STAGE OF DEVELOPMENT.

We have developed and intend to continue to develop a proteomics program. 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.

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 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 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

- 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.

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
- 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 have 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;
- 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 December 1992, we introduced for commercial use our OncoScint imaging agent. In October 1996, we introduced for commercial use our ProstaScint imaging agent. In March 1997, we introduced for commercial use our Quadramet therapeutic product. These products have not yet achieved significant commercial success. In 1998, we undertook a restructuring to focus on the development of our PSMA and proteomics technologies as well as the marketing of these existing products. In February 2001, we introduced for commercial use the iodine version of BrachySeed, a next-generation radioactive seed implant for the treatment of localized prostate cancer. In the second quarter of 2001, AxCell launched its ProChart database product with its marketing partner, InforMax.

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;

- 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.

Our objectives include developing our PSMA technology into novel cancer therapeutics, including a cancer vaccine. 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 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 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;
- 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 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.

ProstaScint and OncoScint CR/OV are manufactured at a cGMP compliant manufacturing facility operated by Bard BioPharma L.P., a subsidiary of Bard BioPharma L.P. We have access to the facility for continued manufacturing of these products until January 2002. We expect that this facility will allow us to meet our projected production requirements for ProstaScint and OncoScint CR/OV in the short term. Our Development and Manufacturing Agreement with DSM

Biologics Company BV is intended to replace the arrangement with Bard BioPharma L.P. with respect to ProstaScint and OncoScint CR/OV

prior to January 2002. We cannot be certain that DSM will satisfactorily perform its obligations under the agreement with us or that we will be able to negotiate a supply agreement with DSM 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. Draxis manufactures BrachySeed in Canada. As a result, we may suffer disruptions in supply due to increased border restrictions resulting from international current events, especially as related to radiopharmaceuticals.

We and our third-party manufacturers are required to adhere to United States Food & Drug Administration regulations setting forth requirements for current Good Manufacturing Practices, or 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 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 and 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 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, sale 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 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;

- o data obtained from preclinical and clinical activities are susceptible to varying interpretations which could delay, limit or prevent regulatory agency approval; and

- o delays or rejections may be encountered based upon changes in regulatory agency policy during the period of drug development and/or the period of review of any application for regulatory agency approval. These delays could adversely affect the marketing of any products we or our collaborative partners develop, impose costly procedures upon our activities, diminish any competitive advantages we or our collaborative partners may attain and adversely affect our ability to receive royalties.

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, its 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 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 severance upon separation of employment under certain circumstances and the 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 our other key personnel except for time-based vesting of options. 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.

OUR BUSINESS INVOLVES ENVIRONMENTAL RISKS THAT MAY RESULT IN LIABILITY.

We are subject to or affected by 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;
- 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 or our products or technologies in patent suits by third parties or if we are required to initiate such suits. We cannot assure you that, if challenged by others in litigation, the patents we have been issued or may in the future be 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 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 of, 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.

WE ARE CURRENTLY SUBJECT TO PATENT LITIGATION.

We are a defendant in a suit 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 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.

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.

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 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.

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 common stock are already outstanding, issuable upon exercise of options and warrants, or are eligible for resale, which may adversely affect the market price of our common stock. As of October 1, 2001, we

had 78,889,223 shares of common stock outstanding, which number of shares: (i) includes an aggregate of 2,423 shares of common stock to be issued to prior holders of securities of CytoRad Incorporated and Cellcor, Inc., which we acquired in 1995, upon each such holders respective exchange of such securities; (ii) excludes 500,000 shares of common stock previously issued by the Company and currently held in escrow pending release, upon certain conditions, to Advanced Magnetics, who currently maintains voting control of such securities; and (iii) excludes 362,270 shares previously issued by the Company and currently held for issuance by the custodian of the Company's Employee Stock Purchase Plan to the participants thereunder, in the event they elect to purchase such shares. An additional 4,648,135 shares of common stock are issuable upon the exercise of outstanding stock options and an additional 309,630 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 (the "Securities Act"), as amended, or pursuant to Rule 144 or Rule 701 promulgated thereunder. In addition, there are 1,469,992 additional shares of common stock reserved for future issuance under our current stock option plans and 172,157 additional shares of common stock reserved for issuance under our current 401(k) Plan. All such reserved shares have been registered with the Securities and Exchange Commission pursuant to currently effective Registration Statements. In addition, there are 300,000 additional shares of common stock reserved for future issuance under our employee bonus plan. We currently intend to register such shares with the Securities and Exchange Commission. In addition, there are 935,576 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, by the Company to ELAN Corporation, plc in August 1998.

In connection with our acquisition of Prostagen, Inc. in June 1999, we issued 2,050,000 unregistered shares of our common stock to the then stockholders of Prostagen, 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 950,000 shares may be issued as contingent payments upon the happening of certain events.

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 placement 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 placement transaction. We are contractually obligated to maintain the effectiveness of such registration

statement.

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

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.

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. 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;
- 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;

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

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

- continued development and commercialization of our proteomics technologies through our wholly-owned subsidiary, AxCell BioSciences Corporation;

- research and development of additional products, including diagnostic and therapeutic products based upon our PSMA technology;

- expansion of our sales and marketing capabilities; and

- other general corporate purposes, including principally working capital and capital expenditures.

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

PLAN OF DISTRIBUTION

We may offer our securities for sale in one or more transactions, including block transactions, at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at prices determined on a negotiated or competitive bid basis. We may sell securities directly, through agents designated from time to time, or by such other means as may be specified in the applicable prospectus supplement. Participating agents or broker-dealers in the distribution of any of the securities may be deemed to be "underwriters" within the meaning of the Securities Act. Any discount or commission received by any underwriter and any participating agents or broker-dealers, and any profit on the resale of shares of the securities purchased by any of them may be deemed to be underwriting discounts or commissions under the Securities Act.

We may sell our securities through a broker-dealer acting as agent or broker or to a broker-dealer acting as principal. In the latter case, the broker-dealer may then resell such securities to the public at varying prices to be determined by the broker-dealer at the time of resale.

To the extent required, the number and amount of the securities to be sold, information relating to the underwriters, the purchase price, the public offering price, if applicable, the name of any underwriter, agent or broker-dealer, and any applicable commissions, discounts or other items constituting compensation to such underwriters, agents or broker-dealers with respect to a particular offering will be set forth in an accompanying supplement to this prospectus.

If underwriters are used in a sale, securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The securities may be offered to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. The underwriter or underwriters with respect to a particular underwritten offering of the securities will be named in the prospectus

supplement relating to that offering and, if an underwriting syndicate is used, the managing underwriter or underwriters will be stated on the cover of the prospectus supplement. Underwriters, dealers, and agents may be entitled, under agreements entered into with us, to indemnification against and contribution toward certain civil liabilities, including liabilities under the Securities Act.

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

Any person participating in the distribution of the securities registered under the registration statement that includes this prospectus will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the applicable Securities and Exchange Commission rules and regulations, including, among others, Regulation M, which may limit the timing of purchases and sales of any of our securities by any such person. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of our securities to engage in market-making activities with respect to our securities. These restrictions may affect the marketability of our securities and the ability of any person or entity to engage in market-making activities with respect to our securities.

Upon sale under the registration statement that includes this prospectus, the securities registered by the registration statement will be freely tradable in the hands of persons other than our affiliates.

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

The consolidated financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their report with respect thereto, and are included herein in reliance upon the authority of said firm as experts in giving said reports.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other documents with the Securities and Exchange Commission. You may read and copy any document we file at the Securities and Exchange Commission'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 Securities and Exchange Commission filings are also available to you on the Securities and Exchange Commission's Internet site at http://www.sec.gov.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission. 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 Securities and Exchange Commission at the address listed above or from the Securities and Exchange Commission's Internet site.

INFORMATION INCORPORATED BY REFERENCE

The Securities and Exchange Commission allows Cytogen to "incorporate by reference" the information Cytogen files with the Securities and Exchange Commission, which means that Cytogen can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus, and information that Cytogen files later with the Securities and Exchange Commission will automatically update and supersede this information. Cytogen incorporates by reference the documents listed below and any future filings made by Cytogen with the Securities and Exchange Commission under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, until the filing of a post-effective amendment to this prospectus which indicates that all securities registered have been sold or which deregisters all securities then remaining unsold:

- The description of our common stock contained in each of 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;

- 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;

- Cytogen's Annual Report on Form 10-K for the year ended December 31, 2000 filed with the Securities and Exchange Commission on March 30, 2001;

- All other reports filed by Cytogen pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, since December 31, 2000;

- The description of our common stock contained in our Registration Statement on Form 8-A; and

- The description of our preferred stock contained in our Registration Statement on Form 8-A.

Cytogen will provide to any person, including any beneficial owner of its securities, to whom this Prospectus is delivered, a copy of any or all of the information that has been incorporated by reference in this Prospectus but not delivered with this Prospectus. You may make such requests at no cost to you by writing or telephoning Cytogen at the following address or number:

Cytogen Corporation
600 College Road East
Princeton, New Jersey 08540
Attention: General Counsel
Telephone: (609) 750-8220

You should rely only on the information incorporated by reference or provided in this Prospectus or any Prospectus Supplement. Cytogen has not authorized anyone else to provide you with different information. Cytogen is not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this Prospectus or any

Prospectus Supplement is accurate as of any date other than the date on the front of those documents.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

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

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

application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

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

as such whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145.

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

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

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

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by Cytogen Corporation. All amounts shown are estimates except the Securities and Exchange Commission registration fee.

Securities and Exchange Commission.....	$ 6,250
Legal fees and expenses.....	$ 10,000
Accounting fees and expenses.....	$ 4,000
Total Expenses.....	$ 20,250

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Subsection (a) of Section 145 of the Delaware General Corporation Law empowers a corporation to indemnify any person who was or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or

agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

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

Section 145 further provides that to the extent a director or officer of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsection (a) and (b) or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith; that the

indemnification provided by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and that the scope of indemnification extends to directors, officers, employees, or agents of a constituent corporation absorbed in a consolidation or merger and persons serving in that capacity at the request of the constituent corporation for another. Section 145 also empowers a corporation to purchase and maintain insurance on behalf of a director or officer of the corporation against any liability asserted against him or her or incurred by him or her in any such capacity or arising out of his or her status as such whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145.

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

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

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits

3.1 Restated Certificate of Incorporation of Cytogen Corporation, as amended. (Incorporated by reference to Exhibit 3.1 to Cytogen Corporation's Form 10-Q Quarterly Report for the quarter ended June 30, 2000 and Exhibit 3 to Cytogen Corporation's Form 10-Q Quarterly Report for the quarter ended June 30, 1996.)

3.2 Form of Certificate of Designations of Series C Junior Participating Preferred Stock of Cytogen Corporation. (Incorporated by reference to Exhibit 1 to Cytogen Corporation's Form 8-K Current Report filed on June 24, 1998. Such Form of Certificate of Designations of Series C Junior Participating Preferred Stock is contained as Exhibit A to that certain Rights Agreement by and between Cytogen Corporation and Chase Mellon Shareholder Services, L.L.C.)

5.1 Opinion of Hale and Dorr LLP.

23.1 Consent of Arthur Andersen LLP.

23.2 Consent of Hale and Dorr LLP (included in Exhibit 5.1).

24.1 Power of Attorney. (Included on signature page).

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");

(ii) To reflect in the prospectus any facts or events arising after the

effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in this Registration Statement.

(2) That, for the purposes of determining any liability under the Securities Act, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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

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

in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Princeton, State of New Jersey, on October 25, 2001.

CYTOGEN CORPORATION

By: /s/ H. Joseph Reiser

H. Joseph Reiser
President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

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

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

Signature	Title	Date
/s/ H. Joseph Reiser --- H. Joseph Reiser	President, Chief Executive Officer and Director (Principal Executive Officer)	October 25, 2001
/s/ Lawrence R. Hoffman ---	Chief Financial Officer (Principal Financial and	October 25, 2001

Lawrence R. Hoffman	Accounting Officer)	
/s/ John E. Bagalay, Jr. --- John E. Bagalay, Jr.	Director	October 25, 2001
/s/ Stephen K. Carter --- Stephen K. Carter	Director	October 25, 2001
--- James A. Grigsby	Director	
/s/ Robert F. Hendrickson --- Robert F. Hendrickson	Director	October 25, 2001
/s/ Kevin G. Lokay --- Kevin G. Lokay	Director	October 25, 2001

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION
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5.1	Opinion of Hale and Dorr LLP.
23.1	Consent of Arthur Andersen LLP.
23.2	Consent of Hale and Dorr LLP (included in Exhibit 5.1 filed herewith).
24.1	Power of Attorney (included on signature page).