CYTOGEN CORP
Form 424B3
August 23, 2007
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Under the Securities Act of 1933, as amended
(Registration Statement No. 333-144774)

Prospectus

9,070,777

SHARES OF COMMON STOCK

This prospectus covers resales by certain of our stockholders of up to 9,070,777 shares of our common stock, par value $0.01 per share, for their own accounts. Of those shares, 2,907,301 are issuable upon the exercise of warrants held by the stockholders at an exercise price of $2.231 per share and 348,876 are issuable upon the exercise of warrants held by the placement agents at an exercise price of $2.231. Such stockholders are referred to throughout this prospectus as selling stockholders.

In this prospectus and any amendment or supplement hereto, unless otherwise indicated, the terms Cytogen , the Company , we , us , and our re and relate to Cytogen Corporation. The selling stockholders who wish to sell their shares of our common stock may offer and sell such shares on a continuous or delayed basis in the future. These sales may be conducted in the open market or in privately negotiated transactions and at market prices, fixed prices or negotiated prices. We will not receive any of the proceeds from the sale of the shares of common stock owned by the selling stockholders but we may receive funds from the exercise of their warrants, if at all. Any such proceeds will be used primarily to support marketing, advance clinical development programs, pursue additional in-licensing opportunities, and other general corporate purposes. One should read this prospectus and any amendment or supplement hereto together with additional information described under the heading Where You Can Find Available Information .

Our common stock is listed for trading on the NASDAQ Global Market, or NASDAQ, under the symbol CYTO. On August 17, 2007, the closing sales price for our common stock on the NASDAQ was $1.04 per share.

INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD READ THE RISK FACTORS SECTION BEGINNING ON PAGE 6 BEFORE YOU DECIDE TO PURCHASE ANY SHARES OF OUR COMMON STOCK.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of the prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is August 23, 2007

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PROSPECTUS SUMMARY

About This Prospectus

This prospectus is a part of a registration statement on Form S-3 filed by us with the Securities and Exchange Commission, referred to herein as the SEC, to register 9,070,777 shares of our common stock. This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. Accordingly, you should refer to the registration statement and its exhibits for further information about us and our common stock. Copies of the registration statement and its exhibits are on file with the SEC. Statements contained in this prospectus concerning the documents we have filed with the SEC are not intended to be comprehensive, and in each instance we refer you to the copy of the actual document filed as an exhibit to the registration statement or otherwise filed with the SEC.

We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

About Cytogen

Cytogen is a specialty pharmaceutical company dedicated to advancing the treatment and care of patients by building, developing, and commercializing a portfolio of oncology products. Our specialized sales force currently markets three therapeutic products and one diagnostic product to the U.S. oncology market. CAPHOSOL® is an advanced electrolyte solution for the treatment of oral mucositis and dry mouth that is approved in the U.S. as a prescription medical device. QUADRAMET® (samarium Sm-153 lexidronam injection) is approved for the treatment of pain in patients whose cancer has spread to the bone. PROSTASCINT® (capromab pendetide) is a PSMA-targeting monoclonal antibody-based agent to image the extent and spread of prostate cancer and SOLTAMOX (tamoxifen citrate) is the first liquid hormonal therapy approved in the U.S. for the treatment of breast cancer in adjuvant and metastatic settings. We are also developing CYT-500, a third-generation radiolabeled antibody to treat prostate cancer.

In 2003, we realigned our corporate direction to focus on building a successful oncology franchise with a specialized commercial infrastructure equipped to deliver sustainable value. To that end, we have established a growing commercial presence in the U.S., which targets both medical and radiation oncology. We believe marketing proprietary specialty oncology products directly, as opposed to receiving royalties on sales by licensees, will enable us to build a growth-oriented oncology business. Because there is a limited number of leading cancer clinics across the U.S., we believe our highly trained and focused sales team can effectively market a complementary product offering to a broad market segment. Our sales and marketing infrastructure has played a critical role in our ability to add new commercial-stage products to our portfolio. Further, we believe the commercial arm of our business is highly scalable and can readily support new product opportunities through modest capital investments.

Strategy and Approach

Our strategy focuses on growing our business organically and through in-licensing initiatives. It revolves around three key priorities:

- *Expanding our near- and long-term revenues.* We have successfully implemented an active in-licensing program to broaden our revenue base with product opportunities that are complementary to our commercial presence in oncology. In April 2006, we acquired the commercial rights to SOLTAMOX from Savient Pharmaceuticals, Inc., or Savient, and in October 2006, we acquired the commercial rights to CAPHOSOL from InPharma A/S, or InPharma. These two products are potential new revenue sources for 2007. We are also pursuing clinical-stage candidates in complementary therapeutic areas with promising regulatory pathways.

- *Maximizing the market potential of our approved products through data-driven initiatives.* A robust, data-driven strategy is underway to enhance the market opportunities for our products within their currently approved indications. We are supporting numerous post-marketing studies for QUADRAMET to optimize its potential as a safe, effective, non-narcotic option for the palliation of pain from cancers that have spread to the bone. We are also advancing initiatives to position PROSTASCINT as an important tool for managing the care of prostate cancer. Recent progress includes:

- The publication of new data in the American Cancer Society s peer-reviewed journal, *Cancer*, demonstrating repeated dosing of QUADRAMET to be a safe and effective treatment option for patients with recurrent painful bone metastases;

- The expanded inclusion of PROSTASCINT within the National Comprehensive Cancer Network s, or NCCN, clinical practice guidelines to include patients with recurrent disease;

- The publication of seven-year survival data in the American Brachytherapy Society s peer-reviewed journal, *Brachytherapy*, demonstrating the potential for PROSTASCINT fusion imaging to help determine patient-specific treatment regimens for prostate cancer patients undergoing brachytherapy; and

- The presentation of Phase 1 data for QUADRAMET in combination with docetaxel for prostate cancer and QUADRAMET in combination with bortezomib for relapsed multiple myeloma.

- *Building long-term sustainability.* We are focused on maintaining a balanced specialty portfolio through three key imperatives: (i) evaluating new indications for our marketed products; (ii) accessing product candidates complementary to our commercial presence; and (iii) monetizing assets that are no longer a strategic fit and realigning our investment on projects that are in line with our business objectives. Plans are underway for a number of Phase 2 clinical studies to evaluate QUADRAMET and other cancer therapies for prostate cancer, breast cancer, multiple myeloma, and osteosarcoma. In January, we also initiated a Phase 1 clinical study to evaluate CYT-500 as a therapy for prostate cancer. In addition, in April 2006, we monetized our interest in a preclinical-stage joint venture, PSMA Development Company LLC, or PDC, for a cash payment of $13.2 million and potential future milestone payments totaling up to $52 million. We are also pursuing strategic opportunities to optimize the extensive intellectual property and technology associated with our AxCell BioSciences subsidiary.

We were incorporated in Delaware on March 3, 1980 under the name Hybridex, Inc. and changed our name to Cytogen Corporation on April 1, 1980. Our executive offices are located at 650 College Road East, Suite 3100, Princeton, New Jersey, 08540 and our telephone number is 609-750-8200.

THE OFFERING

Number of shares of our common stock offered by the selling stockholders	9,070,777 (1) shares
Number of shares of our common stock outstanding after the offering	38,709,635(2) shares
Use of proceeds	We will not receive any proceeds from the sale of common stock by the selling stockholders. We may receive the proceeds from the exercise of warrants held by the selling stockholders, if any are exercised. Any such proceeds will be used primarily to support marketing, advance clinical development programs, pursue additional in-licensing opportunities, and other general corporate purposes. However, the selling stockholders have the right to exercise the warrants pursuant to a cashless exercise provision, in which case, we will not receive any proceeds from the exercise of the warrants from the selling stockholders.
NASDAQ Global Market symbol	CYTO

(1) Includes warrants to purchase 3,256,177 shares of common stock.

(2) Based upon 35,453,458 shares of common stock issued and outstanding as of July 20, 2007, after giving effect to the exercise of warrants to purchase up to an aggregate of 3,256,177 shares of common stock, and excluding shares of common stock to be issued upon the exercise of other outstanding warrants and options.

RISK FACTORS

One should carefully consider the following risk factors and all other information contained in this prospectus before investing in our common stock. Investing in our common stock involves a high degree of risk. Any of the following risks could adversely affect our business, financial condition, results of operations, performance, achievements and industry and could result in a complete loss of one s investment. The risks and uncertainties described below are not the only ones we may face.

We have a history of operating losses and an accumulated deficit and expect to incur losses in the future.

Given the high level of expenditures associated with our business and our inability to generate revenues sufficient to cover such expenditures, we have had a history of operating losses since our inception. We had net losses of $10.4 million and $15.2 million for the three and six months ended June 30, 2007. We had an accumulated deficit of $443 million as of June 30, 2007. We expect that our existing capital resources at June 30, 2007, along with the proceeds received from the July 2007 sale of equity, should be adequate to fund our operations and commitments into 2008.

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

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

- undergoing steps to realign and implement our focus as a product-driven specialty pharmaceutical company;
- establishing and maintaining our in-house specialty sales force; and
- enhancing our marketed product portfolio through marketing alliances and strategic arrangements.

Although we have taken these affirmative steps, we may never be able to successfully implement them, and our ability to generate and sustain significant additional revenues or achieve profitability will depend upon the risk factors discussed elsewhere in this section entitled, Risk Factors or in our Annual Report on Form 10-K for the year ended December 31, 2006. As a result, we may never be able to generate or sustain significant additional revenue or achieve profitability.

We depend on sales of QUADRAMET and PROSTASCINT for substantially all of our near-term revenues.

We expect QUADRAMET and PROSTASCINT to account for substantially all of our product revenues in the near future. For the quarter ended June 30, 2007, revenues from QUADRAMET and PROSTASCINT accounted for approximately 47% and 49%, respectively, of our product revenues. For the six months ended June 30, 2007, revenues from QUADRAMET and PROSTASCINT accounted for approximately 48% and 50%, respectively, of our product revenues. If QUADRAMET or PROSTASCINT does not achieve broader market acceptance, either because we fail to effectively market such products or our competitors introduce competing products, we may not be able to generate sufficient revenue to become profitable.

We will depend on market acceptance of SOLTAMOX and CAPHOSOL for future revenues.

On April 21, 2006, we entered into a distribution agreement with Savient Pharmaceuticals, Inc. granting us exclusive marketing rights for SOLTAMOX in the United States. We introduced SOLTAMOX to the U.S. oncology market in the second half of 2006. Through June 30, 2007, we have not recognized any revenues from SOLTAMOX.

On October 11, 2006, we entered into a license agreement with InPharma granting us exclusive marketing rights for CAPHOSOL in North America. We introduced CAPHOSOL late in the first quarter of 2007. Through June 30, 2007, we have recognized $234,000 of revenues from CAPHOSOL.

Our future growth and success will depend on market acceptance of SOLTAMOX and CAPHOSOL by healthcare providers, third-party payors and patients. Market acceptance will depend, in part, on our ability to demonstrate to these parties the effectiveness of these products. Sales of these products will also depend on the availability of favorable coverage and reimbursement by governmental healthcare programs such as Medicare and Medicaid as well as private health insurance plans. If SOLTAMOX or CAPHOSOL does not achieve market acceptance, either because we fail to effectively market such products or our competitors introduce competing products, we may not be able to generate sufficient

revenue to become profitable.

A small number of customers account for the majority of our sales, and the loss of one of them, or changes in their purchasing patterns, could result in reduced sales, thereby adversely affecting our operating results.

We sell QUADRAMET and PROSTASCINT to a small number of radiopharmacy networks. During the six months ended June 30, 2007, we received 63% of our total revenues from three customers, as follows: 41% from Cardinal Health (formerly Syncor International Corporation); 15% from Mallinckrodt Inc.; and 7% from GE Healthcare (formerly Amersham Health). During the year ended December 31, 2006, we received 64% of our total revenues from three customers, as follows: 41% from Cardinal Health; 14% from Mallinckrodt Inc.; and 9% from GE Healthcare. During the year ended December 31, 2005, we received 67% of our total revenues from three customers, as follows: 47% from Cardinal Health; 11% from Mallinckrodt Inc.; and 9% from GE Healthcare.

The small number of radiopharmacies, consolidation in this industry or financial difficulties of these radiopharmacies could result in the combination or elimination of customers for our products. We anticipate that our results of operations in any given period will continue to depend to a significant extent upon sales to a small number of customers. As a result of this customer concentration, our revenues from quarter to quarter and business, financial condition and results of operations may be subject to substantial period-to-period fluctuations. In addition, our business, financial condition and results of operations could be materially adversely affected by the failure of customer orders to materialize as and when anticipated. None of our customers have entered into an agreement requiring on-going minimum purchases from us. We cannot assure you that our principal customers will continue to purchase products from us at current levels, if at all. The loss of one or more major customers could have a material adverse effect on our business, financial condition and results of operations.

There are risks associated with the manufacture and supply of our products.

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

PROSTASCINT is currently manufactured at a current Good Manufacturing Practices, or cGMP, compliant manufacturing facility operated by Laureate Pharma, L.P. Although we entered into another agreement with Laureate in September 2006 which provides for Laureate s manufacture of PROSTASCINT for us, our failure to maintain a long term supply agreement on commercially reasonable terms will have a material adverse effect on our business, financial condition and results of operations.

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

We have a supply agreement with Rosemont Pharmaceuticals Limited, or Rosemont, to manufacture SOLTAMOX for us. The supply agreement with Rosemont will terminate upon the expiration of the last to expire patent covering SOLTAMOX in the United States, which is currently June 2018. Our failure to maintain a long term supply agreement for SOLTAMOX on commercially reasonable terms will have a material adverse effect on our business, financial condition and results of operations.

We have a manufacturing agreement with Holopack Verpackungstechnik GmbH, or Holopack, to manufacture CAPHOSOL for us. The agreement has a term of two years and automatically renews for an additional year. Such agreement is terminable by Holopack or us on three months notice prior to the end of each term period. Our failure to maintain a long term supply agreement for CAPHOSOL on commercially reasonable terms will have a material adverse effect on our business, financial condition and results of operations.

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

We rely heavily on our collaborative partners.

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

- a license agreement with The Dow Chemical Company relating to the QUADRAMET technology;
- a manufacturing and supply agreement for the manufacture of QUADRAMET with BMSMI;
- a manufacturing agreement for the manufacture of PROSTASCINT with Laureate Pharma, L.P.;
- a distribution services agreement with Cardinal Health 105, Inc. (formerly CORD Logistics, Inc.) for PROSTASCINT;

- a license agreement with The Dow Chemical Company relating to Dow s proprietary MeO-DOTA bifunctional chelant technology for use with our CYT-500 program;

- a distribution agreement and a manufacture and supply agreement with Rosemont related to the supply and marketing of SOLTAMOX;

- a purchase and supply agreement with Oncology Therapeutics Network, JV for the distribution of SOLTAMOX and CAPHOSOL;

- a license agreement with InPharma AS for the marketing of CAPHOSOL; and

- a manufacturing agreement with Holopack for the manufacturing and supply of CAPHOSOL.

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

If our collaborative agreements expire or are terminated and we cannot renew or replace them on commercially reasonable terms, our business and financial results may suffer. If the agreements described above expire or are terminated, we may not be able to find suitable alternatives to them on a timely basis or on reasonable terms, if at all. The loss of the right to use these technologies that we have licensed or the loss of any services provided to us under these agreements would significantly and adversely affect our business, financial condition and results of operations.

Certain of our products are in the early stages of development and commercialization and we may never achieve the revenue goals set forth in our business plan.

We began operations in 1980 and have since been engaged primarily in research directed toward the development, commercialization and marketing of products to improve the diagnosis and treatment of cancer.

In April 2006, we executed a distribution agreement with Savient granting us exclusive marketing rights for SOLTAMOX in the United States. SOLTAMOX, an oral liquid hormonal therapy, is approved for marketing in the United States. We introduced SOLTAMOX in the United States in the second half of 2006, and through June 30, 2007, we have not recognized any revenues from SOLTAMOX.

In October 2006, we entered into a license agreement with InPharma granting us exclusive marketing rights for CAPHOSOL in North America. We introduced CAPHOSOL late in the first quarter of 2007.

In May 2006, the U.S. Food and Drug Administration cleared an Investigational New Drug application for CYT-500, our lead therapeutic candidate targeting PSMA. In February 2007, we announced the initiation of the first human clinical study of CYT-500. CYT-500 uses the same monoclonal antibody from our PROSTASCINT molecular imaging agent, but is linked through a higher affinity linker than is used for PROSTASCINT to a therapeutic as opposed to an imaging radionuclide. This PSMA technology is still in the early stages of development. We cannot assure you that we will be able to commercialize this product.

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

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

- 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, financial condition and results of operations. If we fail to properly address these risks and attain our business objectives, our business could be significantly and adversely affected.

We depend on attracting and retaining key personnel.

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

We do not carry key person life insurance policies and we do not typically enter into long-term arrangements with our key personnel. If we are unable to hire and retain personnel in key positions, our business, financial condition and results of operations could be significantly and adversely affected unless qualified replacements can be found.

Failure of third party payors to provide adequate coverage and reimbursement for our products could limit market acceptance and affect pricing of our products and affect our revenues.

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

Moreover, eligibility for coverage does not imply that any product will be reimbursed in all cases or at a rate that allows us to make a profit or even cover our costs, which include, for example, research, development, production, sales, and distribution costs. Interim payments for new products, if applicable, also may not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower-cost products that are already reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary constraints and/or imperfections in Medicare or Medicaid data. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs, or other payors, or by any future relaxation of laws that restrict imports of certain medical products from countries where they may be sold at lower prices than in the United States.

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

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

We will need to raise additional capital which may not be available or only available on less favorable terms.

Our cash and cash equivalents were $16.1 million at June 30, 2007. We expect that our existing capital resources at June 30, 2007, together with the net proceeds of $9.1 million from the private placement consummated on July 6, 2007, should be adequate to fund our operations and commitments into 2008.

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

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

- success of our product commercialization efforts;
- success of any future acquisitions of complementary products and technologies we may make;
- magnitude, scope and results of our product development and research and 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.

Our capital raising efforts may dilute stockholder interests.

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

We have limited sales, marketing and distribution capabilities for our products.

We have established an internal sales force that is responsible for marketing and selling CAPHOSOL, QUADRAMET, PROSTASCINT and SOLTAMOX. Although we are continuing to expand our internal sales force, it still has limited sales, marketing and distribution capabilities compared to those of many of our competitors. If our internal sales force is unable to successfully market CAPHOSOL, QUADRAMET, PROSTASCINT and SOLTAMOX, our business and financial condition may be adversely affected. If we are unable to establish and maintain significant sales, marketing and distribution efforts within the United States, either internally or through arrangements with third parties, our business may be significantly and adversely affected. In locations outside of the United States, we have not established a selling presence. To the extent that our sales force, from time to time, markets and sells additional products, we cannot be certain that adequate resources or sales capacity will be available to effectively accomplish these tasks.

We may need to raise funds other than through the issuance of equity securities.

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

A significant portion of our total outstanding shares of common stock may be sold in the market in the near future, which could cause the market price of our common stock to drop significantly.

As of August 1, 2007, we had 35,473,957 shares of our common stock issued and outstanding, all of which are either eligible to be sold under SEC Rule 144 or are in the public float or are being registered with the SEC under this prospectus. In addition, we have registered shares of our Common Stock underlying warrants previously issued on numerous Form S-3 registration statements, and we have also registered shares of our common stock underlying options granted or to be granted under our stock option plans. Consequently, sales of substantial amounts of our common stock in the public market, or the perception that such sales could occur, may have a material adverse effect on our stock price.

Our common stock has a limited trading market, which could limit your ability to resell your shares of common stock at or above your purchase price.

Our common stock is quoted on the NASDAQ Global Market and currently has a limited trading market. The NASDAQ Global Market requires us to meet minimum financial requirements in order to maintain our listing. Currently, we believe that we meet the continued listing requirements of the NASDAQ Global Market. We cannot assure you that an active trading market will develop or, if developed, will be maintained. As a result, our stockholders may find it difficult to dispose of shares of our common stock and, as a result, may suffer a loss of all or a substantial portion of their investment.

Our common stock may be subject to the penny stock regulations which may affect the ability of our stockholders to sell their shares.

The NASDAQ Global Market requires us to meet minimum financial requirements in order to maintain our listing. Currently, we believe we meet the continued listing requirements of the NASDAQ Global Market. If we do not continue to meet the continued listing requirements, we could be delisted. If we are delisted from the NASDAQ Global Market, our common stock likely will become a penny stock. In general, regulations of the SEC define a penny stock to be an equity security that is not listed on a national securities exchange or the NASDAQ Stock Market and that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. If our common stock becomes a penny stock, additional sales practice requirements would be imposed on broker-dealers that sell such securities to persons other than certain qualified investors. For transactions involving a penny stock, unless exempt, a broker-dealer must make a special suitability determination for the purchaser and receive the purchaser s written consent to the transaction prior to the sale. In addition, the rules on penny stocks require delivery, prior to and after any penny stock transaction, of disclosures required by the SEC.

If our common stock were subject to the rules on penny stocks, the market liquidity for our common stock could be severely and adversely affected. Accordingly, the ability of holders of our common stock to sell their shares in the secondary market may also be adversely affected.

The liquidity of our common stock could be adversely affected if we are delisted from the NASDAQ Global Market.

In the event that we are unable to maintain compliance with all relevant NASDAQ Listing Standards, our securities may be subject to delisting from the NASDAQ Global Market. If such delisting occurs, the market price and market liquidity of our common stock may be adversely affected. Such listing standards include, among other things, requirements related to the market value of our listed securities and publicly-held shares, and the minimum bid price for such shares. The minimum bid requirement is $1.00 per share. On August 17, 2007, the closing sale price of our common stock as reported by NASDAQ was $1.04.

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

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

Our stock price has been and may continue to be volatile, and your investment in our stock could decline in value or fluctuate significantly.

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

- results of clinical trials;
- technological innovations or new commercial products;

- changes in governmental regulation or the status of our regulatory approvals or applications;
- changes in earnings;

- changes in health care policies and practices;
- developments or disputes concerning proprietary rights;
- litigation or public concern as to safety of the our potential products; and
- changes in general market conditions.

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

We will be obligated to pay liquidated damages if the registration statement is not declared effective within a certain period of time.

On June 28, 2007, we entered into a securities purchase agreement with certain purchasers for the sale of common stock and warrants to purchase our common stock in a private placement. In connection with the securities purchase agreement, we entered into a registration rights agreement in which we were obligated to file a registration statement within 30 days after the date of the securities purchase agreement. Such registration statement was filed on July 23, 2007. We will be obligated to pay each purchaser liquidated damages if:

- the registration statement is not declared effective by September 26, 2007;
- we fail to file with the Commission an acceleration request of the registration statement within five trading days of the date that we are notified by the Commission that such registration statement will not be subject to further review;
- we fail to file a pre-effective amendment and otherwise respond in writing to comments made by the Commission in respect of such registration statement within 15 trading days after the receipt of comments by or notice from the Commission that such amendment is required in order for such registration statement to be declared effective;
- all of the securities sold in the private placement are not registered for resale pursuant to one or more effective registration statements on or before June 30, 2008; or
- after the effectiveness, such registration statement ceases for any reason to remain continuously effective as to all securities sold in the private placement for which it is required to be effective, or the purchasers are not permitted to utilize the prospectus in such registration statement for more than ten trading days or more than an aggregate of 20 trading days during any 12-month period.

The liquidated damages are equal to 1% of the aggregate purchase price paid by each purchaser for any issued and outstanding unregistered securities then held by such purchaser. We are not liable for liquidated damages for shares issued pursuant to the warrants sold in the private placement and the maximum aggregate liquidated damages payable to a purchaser shall be 10% of the aggregate amount invested by such purchaser.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains some forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995 and information relating to us that are based on the beliefs of our management, as well as assumptions made by and the information currently available to our management. When used in this prospectus, the words estimate, project, believe, anticipate, intend, expect and similar expressions are int to identify forward-looking statements. These statements reflect our current views with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in these forward-looking statements, including those risks discussed in this prospectus. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus. Except for special circumstances in which a duty to update arises when prior disclosure becomes materially misleading in light of subsequent circumstances, we do not intend to update any of these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the shares owned by the selling stockholders. However, we may receive proceeds from the exercise of outstanding warrants, if such warrants are exercised. However, the warrants contain provisions for cashless exercise, in which case, we will not receive any proceeds from the exercise of the warrants from the selling stockholders. The warrants entitle the selling stockholders to purchase shares of our common stock at an exercise price of $2.231 per share. Any such proceeds will be used primarily to support marketing, advance clinical development programs, pursue additional in-licensing opportunities, and other general corporate purposes.

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the issuance and registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, NASDAQ Global Market listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

The following is a summary of the transactions by which the selling stockholders acquired the securities being registered by this registration statement.

On July 6, 2007, we completed a private placement of 5,814,600 shares of our common stock and warrants to purchase a total of 3,256,177 shares of our common stock, including warrants issued to the placement agents in connection with the private placement, with an exercise price equal to $2.231 per share. We received gross proceeds of $10.1 million and net proceeds of approximately $9.1 million, from the private placement.

The following table sets forth the aggregate number of shares of common stock beneficially owned by the selling stockholders as of July 20, 2007, after giving effect to the private placement, and the percentage of all shares of common stock held by such selling stockholders prior to and after giving effect to the offering based on 35,453,458 shares of common stock outstanding as of July 20, 2007. The table also assumes that the warrants issued in the private placement are beneficially owned within 60 days of July 20, 2007, although such warrants, by their terms, are not exercisable until December 29, 2007. Except as described in this prospectus, the selling stockholders have not held any position or office or had any other material relationship with us or any of our predecessors or affiliates within the past three years. We considered the following factors and made the following assumptions regarding the table:

- beneficial ownership is determined under Section 13(d) of the Securities Exchange Act of 1934 (Exchange Act) and generally includes voting or investment power with respect to securities and including any securities that grant the selling stockholder the right to acquire Common Stock within 60 days of July 20, 2007; and

- the selling stockholders may sell all of the securities offered by this prospectus under certain circumstances.

Notwithstanding these assumptions, the selling stockholders may sell less than all of the shares listed on the table. In addition, the shares listed below may be sold pursuant to this prospectus or in privately negotiated transactions. Accordingly, we cannot estimate the number of shares of Common Stock that the selling stockholders will sell under this prospectus.

Except as indicated in the footnotes to this table, the persons named in the table have sole voting and investment control with respect to all shares of our Common Stock shown as beneficially owned by them.

Name of Selling Stockholder(3)	Shares of Common Stock Beneficially Owned Prior to Offering (1) Number	Percentage	Number of Shares of Common Stock Being Offered	Shares of Common Stock to be Beneficially Owned After Offering (1)(2) Number	Percentage	
Hudson Bay Fund LP(4)	392,607	1.1	% 371,330	21,277	*	
Hudson Bay Overseas Fund LTD(5)	515,278	1.4	% 492,228	23,050	*	
Fort Mason Master, L.P.(6)	2,262,513	4.99	% 1,013,709	1,248,804	3.4	%
Fort Mason Partners, L.P.(7)	146,723	*	65,739	80,984	*	
J.P. Morgan Ventures Corporation(8)	3,000,000	8.2	% 3,000,000			
Capital Ventures International(9)	1,091,632	3.0	% 870,000	221,632		