CELL THERAPEUTICS INC
Form S-3
February 17, 2009
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As filed with the Securities and Exchange Commission on February 17, 2009

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CELL THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Washington	**2834**	**91-1533912**
(State of other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification No.)**

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

James A. Bianco, M.D.

Chief Executive Officer

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Karen A. Dempsey, Esq.

Orrick, Herrington & Sutcliffe LLP

405 Howard Street

San Francisco, California 94105

(415) 773-5700

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement as determined by the selling securityholders.

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, 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 this Form is a post-effective amendment filed pursuant to Rule 462(d) 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. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of accelerated filer, large accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer ¨	Accelerated filer x
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Warrants to purchase Common Stock, no par value, and shares issuable upon exercise of Warrants	876,457(1)	(1)	$43,508,839(1)	$1,709.90
Common Stock, no par value, issuable upon conversion of Series D 7% convertible preferred stock	38,277(2)	$0.08(3)	$3,062(3)	$0.12
Total	914,734		$43,511,901	$1,710.02

(1) There are being registered hereunder (a) warrants for the purchase of (i) 149,476 shares of common stock issued in connection with the issuance of our Series A 3% convertible preferred stock at an exercise price of $64.40 per share; and (ii) 276,373 shares of common stock issuable upon exercise of warrants issued in connection with the issuance of our Series B 3% convertible preferred stock at an exercise price of $64.80 per share; (b) 259,614 shares of common stock issuable upon exercise of warrants issued in connection with the issuance of our Series C 3% convertible preferred stock at an exercise price of $45.30 per share; (c) 66,985 shares of common stock issuable upon exercise of warrants issued in connection with the issuance of our Series D 7% convertible preferred stock at an exercise price of $25.50 per share; (d) 124,009 shares of common stock issuable upon exercise of warrants issued on December 21, 2007 at an exercise price of $20.20 per share; (e) shares of common stock described in (a) above; and (f) such additional number of shares of common stock, of a currently indeterminable amount, as may from time to time become issuable by reason of stock splits, stock dividends or similar transactions, which shares of common stock are registered hereunder pursuant to Rule 416(a).

(2) The shares of common stock that are being registered are 38,277 shares of common stock issuable upon conversion of the Series D 7% convertible preferred stock at a conversion price of $26.13 per share.

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based upon the average of the high and low sales prices of the registrant s common stock, as reported on the NASDAQ Capital Market on February 9, 2009.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant 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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. The selling securityholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission becomes effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state or jurisdiction where the offer or sale is not permitted.

PROSPECTUS

Subject to completion, dated February 17, 2009

Making cancer more treatable

38,277 Shares of Common Stock Issuable Upon Conversion of Series D 7% Convertible Preferred Stock

Warrants and 876,457 Shares of Common Stock Issuable Upon Exercise of Warrants

We have prepared this prospectus to allow certain selling securityholders identified in this prospectus to offer for resale from time to time:

- warrants issued to certain holders of our Series A 3% convertible preferred stock and up to 149,476 shares of our common stock issuable upon exercise of those warrants;
- warrants issued to certain holders of our Series B 3% convertible preferred stock and up to 276,373 shares of our common stock issuable upon exercise of those warrants;
- up to 259,614 shares of our common stock issuable upon exercise of warrants we issued to certain holders of our Series C 3% convertible preferred stock;
- up to 38,277 shares of our common stock issuable upon conversion of our Series D 7% convertible preferred stock, and up to 66,985 shares of our common stock issuable upon exercise of warrants we issued to certain holders of our Series D 7% convertible preferred stock; and
- up to 124,009 shares of our common stock issuable upon exercise of warrants we issued in connection with an offering of common stock on December 21, 2007.

The selling securityholders may offer and sell their common shares and warrants described above in public or private transactions, or both. These sales may occur at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market price, or at negotiated prices.

The selling securityholders may sell securities through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling securityholders, the purchasers of the securities, or both. See Plan of Distribution for a more complete description of the ways in which the securities may be sold. We will not receive any of the proceeds from the sale of the securities by the selling securityholders.

Our common stock is quoted on The NASDAQ Capital Market and on the MTA in Italy under the symbol CTIC . On February 9, 2009, the last reported sale price of our common stock on The NASDAQ Capital Market was $0.08.

Investing in our securities involves a high degree of risk. See Risk Factors beginning on page 8 of this prospectus.

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

The date of this prospectus is , 2009

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No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus or any prospectus supplement. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or any applicable prospectus supplement is current only as of its date, and the information contained in any document incorporated by reference in this prospectus is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any prospectus supplement or any sale of a security.

ABOUT THIS PROSPECTUS

This prospectus incorporates important business and financial information about us that is not included in or delivered with this document. This information is available without charge upon written or oral request. See Documents Incorporated by Reference and Where You Can Find More Information. Any statement contained in the prospectus concerning the provisions of any document filed as an exhibit to the registration statement or otherwise filed with the Securities and Exchange Commission is not necessarily complete, and in each instance, reference is made to the copy of the document filed.

You should rely only on the information contained in or incorporated by reference into this prospectus. No dealer, salesperson or any other person is authorized to give any information or to make any representation other than those contained in or incorporated by reference in this prospectus. If such information is given or representations are made, you may not rely on that information or those representations as having been authorized by us or by any selling securityholder. 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 page of those documents. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus may only be used where it is legal to sell the securities. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

In addition to the other information contained or incorporated by reference in this prospectus, you should carefully consider the risk factors contained in and incorporated by reference into this prospectus when evaluating an investment in our common stock. This prospectus and the documents incorporated by reference into this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act). All statements other than statements of historical fact are forward-looking statements for purposes of these provisions, including:

- any statement regarding the performance, or likely performance, or outcomes or economic benefits of any licensing or other agreement, including any agreement with Novartis Pharma AG or its affiliates, including whether or not such partner will elect to participate, terminate or otherwise make elections under any such partnership agreement or whether any regulatory authority required to enable such agreement will be obtained;

- any projections of revenues, operating expenses or other financial items;

- any statements of the plans and objectives of management for future operations;

- any statements concerning proposed new products or services;

- any statements regarding future operations, plans, regulatory filings or approvals;

- any statements on plans regarding proposed or potential clinical trials or new drug filing strategies or timelines;

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any statements concerning proposed new products or services, any statements regarding pending or future mergers or acquisitions; and

any statements regarding future economic conditions or performance, and any statement of assumptions underlying any of the foregoing.

In some cases, forward-looking statements can be identified by the use of terminology such as may , will , expects , plans , anticipates , estima potential , or continue or the negative thereof or other comparable terminology. There can be no assurance that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in the forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including, but not limited to, the risk factors set forth in this prospectus. All forward-looking statements and reasons why results may differ included in this prospectus are made as of the date hereof, and we assume no obligation to update any such forward-looking statement or reason why actual results might differ.

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SUMMARY

The following summary highlights information contained elsewhere, or incorporated by reference, in this prospectus. The following summary does not contain all the information that you should consider before investing in the securities offered by this prospectus. You should read this entire prospectus carefully, including the documents that we incorporate by reference into this prospectus. Unless otherwise indicated, CTI, Company, we, us, our and similar terms refer to Cell Therapeutics, Inc. and its subsidiaries.

Our Company

We develop, acquire and commercialize innovative treatments for cancer. Our goal is to build a leading biopharmaceutical company with a diversified portfolio of proprietary oncology drugs. Our research, development, acquisition and in-licensing activities concentrate on identifying and developing new, less toxic and more effective ways to treat cancer.

In December 2008, we formed a 50/50 owned joint venture with Spectrum Pharmaceuticals, Inc., or Spectrum, to commercialize and develop the radiopharmaceutical product Zevalin® (ibritumomab tiuxetan) in the United States. Zevalin is a form of cancer therapy called radioimmunotherapy and is indicated for treatment of relapsed or refractory, low-grade or follicular B-cell non- Hodgkin s lymphoma, or NHL, including patients with rituximab refractory follicular NHL. Zevalin is also indicated, under accelerated approval, for the treatment of relapsed or refractory, rituximab-naïve, low-grade and follicular NHL. It was approved by the FDA in February 2002 as the first radioimmunotherapeutic agent for the treatment of NHL. The joint venture is operated through RIT Oncology, LLC. Under terms of the operating agreement with Spectrum, the companies are the sole members of the joint venture whose sole purpose is to commercialize Zevalin in the United States. A Board of Managers comprised of an equal number of members from both companies has been established to govern the joint venture. Both parties equally provide for the future capital requirements of the joint venture and share equally in its profits and losses. We received an initial payment of $7.5 million at closing and an additional $7.5 million in early January 2009. In addition we may receive up to $15 million in product sales milestone payments upon achievement of certain revenue targets.

Prior to the establishment of the joint venture, in December 2007, we acquired the U.S. development, sales and marketing rights to Zevalin from Biogen Idec Inc., or Biogen, pursuant to an Asset Purchase Agreement. The assets acquired included the Zevalin FDA registration, FDA dossier, U.S. trademark, trade name and trade dress, customer list, certain patents and the assignment of numerous contracts. Additionally, we had entered into a 78-month supply agreement with Biogen to manufacture Zevalin for sale in the United States as well as a security agreement providing Biogen a first priority security interest in the assets purchased in the transaction. In connection with the joint venture transaction and the receipt of Biogen s consent to such transaction, we and Biogen amended the terms of the supply agreement, the security agreement and certain milestone payments under the asset purchase agreement, as further described below.

On June 16, 2008, we entered into an Access Agreement with Bayer Schering Pharma AG, or Bayer, which holds the rights to Zevalin outside of the United States. Under the agreement, Bayer has given us access to data from Bayer s phase III first-line indolent trial, or FIT trial, of Zevalin. At the American Society of Hematology meeting in December 2007, Bayer first published the results of their FIT trial for Zevalin. In April 2008, based on these data, Bayer received approval in Europe for use of Zevalin in consolidation therapy after remission induction in previously untreated patients with follicular lymphoma. Under the terms of the agreement with Bayer, we made an initial payment to Bayer of $2 million. In connection with the joint venture transaction, the Access Agreement was assigned to the joint venture, and beginning January 1, 2009, the joint venture has paid Bayer royalties on net sales of Zevalin and will continue to do so until an aggregate of $11.5 million in royalties has been paid to Bayer under the agreement. We submitted a supplemental biologics license application, or sBLA, on September 30, 2008 for use of Zevalin in consolidation therapy of first remission in advanced stage follicular NHL. The FDA has granted priority review status for this sBLA. The joint venture will make an additional payment of $3 million to Bayer if it is able to obtain FDA approval of an sBLA for Zevalin based on the FIT trial results and milestone payments to Biogen.

We are developing OPAXIO (paclitaxel poliglumex), which we have previously referred to as XYOTAX, for the treatment of non-small cell lung cancer, or NSCLC, and ovarian cancer. As announced in March and May 2005,

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our STELLAR 2, 3 and 4 phase III clinical studies for OPAXIO did not meet their primary endpoints of superior overall survival. However, we believe that the reduction in toxicities coupled with superior convenience and less supportive care demonstrated in the STELLAR 4 phase III clinical trial merits consideration for approval as single-agent therapy for patients with advanced NSCLC who have poor performance status, or PS2. Currently there are no drugs approved for PS2 NSCLC patients. On March 4, 2008, we submitted a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMEA, for first-line treatment of patients with advanced NSCLC who are PS2, based on a non-inferior survival and improved side effect profile which we believe was demonstrated in our STELLAR clinical trials. The application is based on a positive opinion we received from the EMEA s Scientific Advice Working Party, or SAWP; the EMEA agreed that switching the primary endpoint from superiority to non-inferiority is feasible if the retrospective justification provided in the marketing application is adequate. The discussions with the SAWP focused on using the STELLAR 4 study as primary evidence of non-inferiority and the STELLAR 3 study as supportive of the MAA. The application was accepted for review in April 2008 and the MAA has now entered the marketing approval review process, which generally takes 15 to 18 months.

We are also developing OPAXIO for women with pre-menopausal levels of estrogen, regardless of age, who have advanced NSCLC with normal or poor performance status. The basis for this clinical study was in part related to a pooled analysis of STELLAR 3 and 4 phase III trials for treatment of first-line NSCLC PS2 patients which we believe demonstrates a statistically significant survival advantage among women receiving OPAXIO when compared to women or men receiving standard chemotherapy. A survival advantage for women over men was also demonstrated in a first-line phase II clinical trial of OPAXIO and carboplatin, known as the PGT202 trial, supporting the potential benefit observed in the STELLAR 3 and 4 trials. In December 2005, we initiated a phase III clinical trial, known as the PIONEER, or PGT305, study, for OPAXIO as first-line monotherapy in PS2 women with NSCLC. In December 2006, we agreed with the recommendation of the Data Safety Monitoring Board to close the PIONEER lung cancer clinical trial due, in part, to the diminishing utility of the PIONEER trial given our plans to submit a new protocol to the FDA. In early 2007, we submitted two new protocols under a Special Protocol Assessment, or SPA, to the FDA. The new protocols, known as PGT306 and PGT307, focus exclusively on NSCLC in women with pre-menopausal estrogen levels, the subset of patients where OPAXIO demonstrated the greatest potential survival advantage in the STELLAR trials. We believe the lack of safe and effective treatment for women with advanced first-line NSCLC who have pre-menopausal estrogen levels represents an unmet medical need. We initiated the PGT307 trial in September 2007. Although the FDA has established the requirement that two adequate and well-controlled pivotal studies demonstrating a statistically significant improvement in overall survival will be required for approval of OPAXIO in the NSCLC setting, we believe that compelling results from a single trial, PGT307, along with supporting evidence from prior clinical trials, may enable us to submit a new drug application, or NDA, in the United States. In early 2008, we limited enrollment on the PGT307 study to U.S. sites only, until either approval of the MAA by the EMEA or until positive results from the GOG0212 trial of OPAXIO for first-line maintenance therapy in ovarian cancer, discussed below, are reported.

We are also developing OPAXIO as potential maintenance therapy for women with advanced stage ovarian cancer who achieve a complete remission following first-line therapy with paclitaxel and carboplatin. This study, the GOG0212 trial, is under the control of the Gynecologic Oncology Group and is expected to enroll 1,100 patients by early 2012. We are targeting a potential interim analysis, based on the number of events in the database, for late 2009 and, if successful, could lead to an NDA filing in 2010.

We are developing pixantrone (BBR 2778), a novel DNA major groove binder with an aza-anthracenedione molecular structure, differentiating it from anthracycline chemotherapy agents. A new chemical compound for the treatment of NHL, and various other hematologic malignancies, solid tumors, and immunological disorders, pixantrone is being developed to improve activity and safety in treating cancers currently treated with the anthracycline family of anti-cancer agents. Pixantrone was studied in our EXTEND, or PIX301, clinical trial which is a phase III single-agent trial of pixantrone for patients with relapsed, aggressive non-Hodgkin s lymphoma who received two or more prior therapies and who were sensitive to treatment with anthracyclines. An interim analysis of the EXTEND study of pixantrone was performed by the independent Data Monitoring Committee in the third quarter of 2006. Based on their review, the study continued. In September 2007, we announced that we had reduced the enrollment target and decided to conduct a full analysis of the EXTEND trial, instead of an interim analysis as previously planned. The trial enrolled 140 patients who were randomized to receive either pixantrone or another single-agent drug currently used for the treatment of this patient population selected by the physician. In November 2008 we announced that this trial achieved the primary efficacy endpoint.

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Patients randomized to treatment with pixantrone achieved a high rate of confirmed and unconfirmed complete remissions compared to patients treated with standard chemotherapy (14/70 (20.0%) for pixantrone arm compared to 4/70 (5.7%) for the standard chemotherapy arm, p = 0.02). No patient (0%) in the standard chemotherapy arm achieved a confirmed complete remission compared to 8/70 (11%) of pixantrone recipients. Pixantrone treatment also significantly increased the overall response rate (CR/CRu+PR) with (26/70 (37.1%) for the pixantrone arm compared to 10/70 (14.3%) for the control arm, p = 0.003). In January 2009 we announced preliminary progression free survival results from the trial that show patients treated with pixantrone experienced a statistically significant improvement in median progression free survival, compared with other single-agent chemotherapeutic agents (4.7 months vs. 2.6 months, hazard ratio = 0.6; p =0.0074, pixantrone vs. standard chemotherapy) based on an intent to treat analysis. Progression free survival, CR/CRu and ORR were determined by an independent assessment panel that was blinded to the treatment assignments. We expect to begin submission of a rolling New Drug Application (NDA) and request priority review for pixantrone to treat relapsed aggressive NHL in the first quarter of 2009. In February 2009 we entered into an agreement with IDIS Limited, or IDIS, to manage our investigational drug pixantrone on a named patient basis in Europe. Pixantrone will be supplied by IDIS to healthcare professionals for the treatment of individual patients with relapsing aggressive non-Hodgkin s lymphoma. The program is expected to be initiated by second quarter of 2009.

We also conducted the RAPID (PIX203) phase II study (CHOP-R vs. CPOP-R in which pixantrone is substituted for doxorubicin in the CHOP-R regimen compared to the standard CHOP-R regimen in patients with previously untreated diffuse large B-cell lymphoma. An interim analysis of the RAPID study was reported in July 2007. It showed that to date, a majority of patients on both arms of the study achieved a major objective anti-tumor response (complete response or partial response). Patients on the pixantrone arm of the study had clinically significant less left ventricular ejection fraction (LVEF) drops, infections, and thrombocytopenia (a reduction in platelets in the blood) as well as significant reduction in febrile neutropenia. In early 2008 we closed enrollment on the RAPID trial because we had adequate sample size to demonstrate differences in cardiac events and other clinically relevant side effects between pixantrone and doxorubicin.

We launched a phase III trial of pixantrone in indolent NHL, the PIX303 trial, in September 2007, which was designed to evaluate the combination of fludarabine, pixantrone, and rituximab versus fludarabine and rituximab in patients who have received at least one prior treatment for relapsed or refractory indolent NHL. We closed the PIX303 trial in early 2008 based on, among other considerations, our plans to refocus our resources on obtaining pixantrone approval based on the EXTEND phase III trial before making additional substantive investments in alternative indications for pixantrone as well as the changing competitive landscape in second-line follicular NHL. In May 2007, we received fast track designation from the FDA for pixantrone for the treatment of relapsed or refractory indolent NHL.

On July 31, 2007, we completed our acquisition of Systems Medicine, Inc., or SM, a privately held oncology company, in a stock for stock merger valued at $20 million. SM stockholders can also receive a maximum of $15 million in additional consideration (payable in cash or stock at our election, subject to certain NASDAQ limitations on issuance of stock) upon the achievement of certain FDA regulatory milestones. Under the agreement, SM became Systems Medicine LLC and operates as a wholly owned subsidiary of CTI. SM holds worldwide rights to use, develop, import and export brostallicin, a synthetic DNA minor groove binding agent that has demonstrated anti-tumor activity and a favorable safety profile in clinical trials in which more than 230 patients have been treated to date. SM currently uses a genomic-based platform to guide development of brostallicin; we expect to use that platform to guide development of our licensed oncology products in the future. SM also has a strategic affiliation with the Translational Genomics Research Institute, or TGen, and has the ability to use TGen s extensive genomic platform and high throughput capabilities to target a cancer drug s context-of-vulnerability, which is intended to guide clinical trials toward patient populations where the highest likelihood of success should be observed, thereby potentially lowering risk and shortening time to market.

A phase II study of brostallicin, a synthethic DNA minor groove binding agent that has demonstrated anti-tumor activity and a favorable safety profile in clinical trials in which more than 200 patients have been treated to date, in relapsed/refractory soft tissue sarcoma met its predefined activity and safety hurdles and resulted in a first-line phase II study that is currently being conducted by the European Organization for Research and Treatment of Cancer, or EORTC. Planned enrollment for this study was completed in August 2008 and the EORTC plans to conduct the final data analysis in 2009. Brostallicin has also demonstrated synergy with new targeted agents as well as established treatments in preclinical trials; consequently, we began a multi-arm combination study with brostallicin and other agents, including Avastin (bevacizumab) which was substantially completed in the fourth quarter of 2008.

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We are currently focusing our efforts on pixantrone, Zevalin, OPAXIO, and brostallicin.

We were incorporated in Washington in 1991. Our principal executive offices are located at 501 Elliott Avenue West, Suite 400, Seattle, Washington 98119. Our telephone number is (206) 282-7100. We make available on our web site important information such as press releases, presentations from investor and medical conferences, as well as other information about our company. The address for our website is http://www.celltherapeutics.com and the address for the investor relations page of our website is http://www.celltherapeutics.com/investors. Information contained in, or accessible through, our website does not constitute a part of this prospectus.

CTI , OPAXIO and XYOTAX are our proprietary marks. Our joint venture also owns the rights to the mark Zevalin for use in the United States All other product names, trademarks and trade names referred to in this prospectus are the property of their respective owners.

As of September 30, 2008, we had incurred aggregate net losses of approximately $1.3 billion since inception. We expect to continue to incur additional operating losses for at least the next couple of years.

Recent Developments

Debt and Equity Restructurings

We have a substantial amount of debt outstanding, and our annual interest expense with respect to our debt is significant. Beginning in December 2007 and continuing through 2008, we completed restructurings of various series of our convertible notes which retired a portion of such debt, extended the maturity date on certain such debt and involved the issuance of additional convertible notes and shares of common stock to holders of the exchanged notes. As of December 31, 2008 we had an aggregate principal balance of approximately $142.2 million in convertible notes with interest rates ranging from 4% to 10%.

On December 5, 2008, we announced via press release that our Board of Directors had authorized a modified Dutch tender offer seeking to repurchase a portion or all of an aggregate of $124 million of our outstanding 4% Convertible Senior Subordinated Notes due 2010, 5.75% Convertible Senior Notes due 2011, 6.75% Convertible Senior Notes due 2010, 7.5% Convertible Senior Notes due 2011 and 9% Convertible Senior Notes due 2012 at a significant discount to the notes par value. We continue to desire to pursue the tender offer as part of our recapitalization plan, but as of February 13, 2009 the tender offer for this debt has not commenced. The tender offer, if commenced, will be made solely by and subject to the terms and conditions set forth in a Schedule TO (including the Offer to Purchase and related Letter of Transmittal) that we will file with the SEC.

In early February 2009, we issued 6,702 shares of new Series F preferred stock in exchange for our Series A 3% convertible preferred stock, our Series B 3% convertible preferred stock and our Series C 3% convertible preferred stock. As of February 12, 2009, 100 shares of our Series A 3% convertible preferred stock, 1,000 shares of our Series D 7% convertible preferred stock and 6,702 shares of our Series F preferred stock were outstanding.

The Series F Preferred Stock has no fixed dividend rate, has an initial liquidation preference of $1,000 per share, and if and when it becomes convertible, shall be convertible into Common Stock at the option of the holder at a conversion price of $0.14 per share. The Series F Preferred Stock becomes convertible on the later of April 1, 2009 or the day our authorized number of shares of Common Stock is increased. Each share of Series F Preferred Stock votes together with all other shares of common stock and preferred stock as if part of a single class and is entitled to 7,142.9 votes per share of Series F Preferred Stock in any such vote.

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Restructuring of Resources

On January 30, 2008, we announced a plan to refocus our resources on late-stage and marketed products, which involves increasing sales of Zevalin in the United States and preparing the marketing applications for OPAXIO and pixantrone described above, while advancing the clinical development of brostallicin. This plan was intended to reduce operating expenses and projected net cash operating expenses. As part of these refocusing efforts, approximately 30 of our U.S. employees were terminated. We continue to explore ways to further reduce our operating expenses for 2009.

In November 2007, we moved to reduce expenses related to having a subsidiary in Milan by converting our Bresso subsidiary into a corporate branch. This conversion reduced significant costs associated with legal and overlapping independent auditor expenses. On February 6, 2009, we announced that we engaged the services of a strategic advisory consulting firm to assist in developing strategic options for a partnership, asset divestment or joint venture for our Bresso corporate branch.

Lack of Liquidity

As of September 30, 2008 we had cash and cash equivalents, securities available-for-sale and interest receivable of approximately $11.7 million, and total current liabilities of $39.7 million. Our current cash and cash equivalents, securities available-for-sale and interest receivable continue to be significantly less than our total current liabilities. Currently, we do not have sufficient cash to fund our operations beyond February 2009 and we need to raise additional capital in order to meet our operational needs. See Risk Factors.

In addition, our auditors, Stonefield Josephson, have expressed substantial doubt about our ability to continue to operate as a going concern in their audit opinion dated March 26, 2008 in connection with our audited financial statements for the year ended December 31, 2007.

Recent Financings

In October 2008, we sold to a single institutional investor $24.7 million in principal amount of our 9.66% convertible senior notes due October 2011; of these gross proceeds, we used $10 million as a portion of the approximately $18.2 million repurchase price for approximately $18.2 million principal amount of our 15% convertible senior notes and related warrants to purchase common stock issued in June 2008 to such investor. The funds released to us from the escrow account established to pay the make-whole and interest payments on the 15% convertible senior notes were used to pay the remaining approximately $8.2 million of the repurchase price. In addition, approximately $7.2 million was placed in an escrow account to be used to make interest payments and make-whole payments on the 9.66% senior convertible notes for 12 months following the close of that offering.

In December 2008, we sold $32.7 million in principal amount of our 10% Convertible Senior Notes due 2011 (the 10% Convertible Notes) to the same institutional investor as in our October 2008 convertible note offering. In connection with the offering, we also repurchased, for approximately $29.0 million, approximately $30.0 million principal amount of our 15% Convertible Senior Notes due 2011 issued in June 2008 to the investor, our Series B 18.33% convertible Senior Notes due 2011 issued in August 2008 to the investor and our 9.66% Convertible Senior Notes due 2011 issued in October 2009 to the investor and warrants to purchase approximately 5.15 million shares of common stock issued in 2007 and 2008 to the investor. We used approximately $16.4 million of the $32.7 million in cash that we received from the offering of our 10% Convertible Senior Notes to repurchase these three series of convertible senior notes and warrants and we paid the remaining approximately $12.6 million of the repurchase price from funds released to us from the escrow account established to pay the make-whole and interest payments on the three series of convertible senior notes repurchased. The investor also granted us a conditional put option right to issue and sell to the investor an additional $3 million of our Series C 10% Convertible Senior Notes, or C Notes, if we undertake a tender offer to repurchase our convertible notes and before March 31, 2009 receive tenders (which are not withdrawn) of at least $62 million principal amount of convertible notes, or an additional $6 million of C Notes if we undertake a tender offer to repurchase our convertible notes and before March 31, 2009 receive tenders (which are not withdrawn) of at least $93 million principal amount of our convertible notes. The C Notes would have substantially the same terms as the 10% Convertible Notes. The put option right is subject to various closing conditions.

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Joint Venture

In December 2008, we and Spectrum formed a 50/50 owned joint venture to commercialize and develop Zevalin in the United States. As part of the joint venture transaction, we contributed all assets exclusively related to the Zevalin product to the joint venture and in exchange received a 50% membership interest in the joint venture, an initial payment at closing from the joint venture of $7.5 million and a second payment of $7.5 million in January 2009. We may also receive up to $15 million in product sales milestone payments upon the joint venture s achievement of certain revenue targets.

At the closing of the joint venture, the supply agreement with Biogen was amended pursuant to the First Amendment to Supply Agreement dated December 15, 2008 relating to the manufacture and supply of Zevalin Product to the joint venture, modifying certain of the pricing and manufacturing technology transfer terms contained in the original supply agreement dated December 21, 2007 between CTI and Biogen, and also providing that the end of the term of the agreement may be accelerated by Biogen in certain instances in the event of a mid-term manufacturing technology transfer. CTI s rights and obligations, including its payment obligations to Biogen, under the supply agreement, as amended, was assigned to and assumed by the joint venture in connection with the closing of the joint venture transaction.

The joint venture is governed by a board of Managers comprised of an equal number of members from both companies. Both parties equally provide for the future capital requirements of the joint venture and share equally in its profits and losses. In addition, we have an option to sell our 50% interest in the joint venture to Spectrum for $18 million, subject to adjustment for any amounts owed between us and the joint venture at the time of such sale, payable in installments but no later than 90 days following the closing of such sale. We may exercise this sale option at any time through July 15, 2009.

Exchange Listing Matters

As our market capitalization did not comply with the minimum market capitalization requirements for companies listed on The NASDAQ Global Market, we had a hearing before a NASDAQ Listing Qualifications Panel (the Panel) in November 2008 and presented a plan for regaining compliance with the NASDAQ Marketplace Rules. The Panel approved a transfer of our listing to The NASDAQ Capital Market effective with the opening of trading on January 8, 2009, subject to our evidencing compliance with all applicable requirements for continued listing on The NASDAQ Capital Market, including a minimum market value of listed securities of $35 million or its alternative, as set forth in NASDAQ Marketplace Rule 4103(c)(3), by February 12, 2009.

On January 23, 2009, we received an Additional Staff Determination (the Determination Letter) from The NASDAQ Stock Market (NASDAQ) stating that the staff had concluded that our recent issuance of 38,185,911 shares of common stock (the Shares) in connection with an amendment to the earn-out provision (the Amendment) of the Acquisition Agreement, dated as of July 27, 2007, by and among us, Cactus Acquisition Corp., Saguaro Acquisition Corporation LLC, Systems Medicine, Inc. (SMI) and Tom Hornaday and Lon Smith, in their capacities as representatives of the SMI stockholders (the Stockholder Representatives) under the agreement, whereby we acquired Systems Medicine, Inc. in a stock-for-stock merger, did not comply with the shareholder approval requirements set forth in NASDAQ Marketplace Rule 4350(i)(1)(C). Marketplace Rule 4350(i)(1)(C) requires shareholder approval in connection with an acquisition if the issuance or potential issuance is greater than 20% of the pre-acquisition shares outstanding.

In response to the concerns raised by the NASDAQ staff, we entered into a Cancellation Agreement dated January 23, 2009 with the Stockholder Representatives to cancel the Amendment and rescind the issuance of the 38,185,911 shares and to reinstate the original terms of the earn-out provision without modification.

The Determination Letter also indicated that we have at times not complied with Marketplace Rule 4310(c)(17), which requires companies to submit a Listing of Additional Shares form to NASDAQ no later than 15 days prior to entering into a transaction that involves the issuance of additional securities, including the form that was submitted in connection with the Amendment, and based upon our history of non-compliance with certain of NASDAQ s corporate governance criteria, indicated that the Staff had raised public interest concerns under Marketplace Rule 4300. The Determination Letter provided formal notice that the Panel will consider the additional matters raised by the Staff in rendering a determination regarding our continued listing on The NASDAQ Capital Market. On January 30, 2009, we provided the Panel with a written response to the Determination Letter and requested an extension until February 27, 2009, to regain compliance with the NASDAQ rule requiring us to have $35 million minimum market value of listed securities. Our stock is also traded on the MTA stock market in Milan, Italy. In the event our common stock is delisted from the NASDAQ markets, we currently expect that our common stock would be eligible to be listed on the OTC Bulletin Board or Pink Sheets. We do not know what impact delisting from the NASDAQ markets may have on our listing with Borsa Italiana. In the event our common stock is delisted, the remaining holders of our Series A and Series D preferred stock may elect to have its shares redeemed at 130% of the stated value of the Series D preferred stock plus all accrued but unpaid dividends or other payments due on such shares.

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The Borsa Italiana and *Commissione Nazionale per le Società e la Borsa*, or CONSOB, have made several requests for information asking us to provide additional clarifications about our business operations and financial condition, and we have complied with such requests and have met with CONSOB on several occasions to answer questions. On February 10, 2009, we were notified that the Borsa Italiana had indefinitely halted trading of our common stock on the MTA stock market in Milan, Italy. As result of such action, NASDAQ also halted trading of our common stock on the same day. CONSOB has requested additional information and clarification on our business operations and financial condition.

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RISK FACTORS

You should carefully consider the risks described below and other information in this prospectus and in the documents incorporated by reference into this prospectus before deciding to invest in our securities. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also impair our business, financial condition, operating results and prospects. If any of the following risks actually occur, they could materially adversely affect our business, financial condition, operating results or prospects. In that case, the trading price of our securities could decline.

Factors Affecting Our Operating Results and Financial Condition

We expect to continue to incur net losses, and we might never achieve profitability.

We were incorporated in 1991 and have incurred a net operating loss every year. As of September 30, 2008, we had an accumulated deficit of approximately $1.3 billion. We are pursuing regulatory approval for pixantrone, OPAXIO, and brostallicin and seeking regulatory approval for the expansion of approved uses of Zevalin. We will need to conduct research, development, testing and regulatory compliance activities and undertake manufacturing and drug supply activities, expenses which, together with projected general and administrative expenses, will result in operating losses for the foreseeable future. We may never become profitable, even if we are able to commercialize products currently in development or otherwise.

Our debt and operating expenses exceed our net revenues.

We have a substantial amount of debt outstanding, and our annual interest expense with respect to our debt is significant. We need to raise capital to continue to fund our operations as our current cash resources would not fund us beyond February 2009. Unless we raise substantial additional capital, we will not be able to pay all of our operating expenses or repay our debt or the interest, liquidated damages or other payments that may become due with respect to our debt.

We need to raise additional funds and expect that we will need to continue to raise funds in the future, and funds may not be available on acceptable terms, or at all.

We have substantial operating expenses associated with the development of our product candidates and as of September 30, 2008 we had cash and cash equivalents, securities available-for-sale and interest receivable of approximately $11.7 million, and total current liabilities of approximately $39.7 million. We also have a substantial amount of debt outstanding: as of December 31, 2008 we had an aggregate principal balance of approximately $142.2 million in convertible notes with interest rates ranging from 4% to 10%. We expect that our existing cash and cash equivalents, securities available-for-sale and interest receivable, and proceeds received from our offerings to date, will not provide sufficient working capital to fund our presently anticipated operations beyond February 2009, and we therefore need to raise additional capital.

We may seek to raise such capital through public or private equity financings, partnerships, joint ventures, dispositions of assets, debt financings or restructurings, bank borrowings or other sources. However, additional funding may not be available on favorable terms or at all. If adequate funds are not otherwise available, we will further curtail operations significantly, including the delay, modification or cancellation of operations and plans related to pixantrone, OPAXIO, brostallicin, expanded uses of Zevalin and other products we may be developing. To obtain additional funding, we may need to enter into arrangements that require us to relinquish rights to certain technologies, drug candidates, products and/or potential markets. In addition, some financing alternatives may require us to meet additional regulatory requirements in Italy and the U.S., which may increase our costs and adversely affect our ability to obtain financing. To the extent that additional capital is raised through the sale of equity, or securities convertible into equity, shareholders may experience dilution of their proportionate ownership of us.

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Our common stock is listed on The NASDAQ Capital Market and the MTA stock market in Milan, Italy and we may not be able to maintain those listings or trading on these exchanges may be halted or suspended, which may make it more difficult for investors to sell shares of our common stock

Effective with the opening of trading on January 8, 2009, the U.S. listing of our common stock was transferred to The NASDAQ Capital Market, subject to meeting a minimum market value of listed securities of $35 million. The NASDAQ Listing Qualifications Panel (the Panel) approved this transfer after our market capitalization did not comply with the minimum market capitalization requires for companies listed on The NASDAQ Global Market, and we presented a plan for regaining compliance with the NASDAQ Marketplace Rules. On January 23, 2009, we received an Additional Staff Determination Letter (the Determination Letter) from The NASDAQ Stock Market (NASDAQ) that stated the NASDAQ staff had concluded that we had violated Marketplace Rule 4350(i)(1)(C), which requires shareholder approval in connection with an acquisition if the issuance or potential issuance is greater than 20% of the pre-acquisition shares outstanding, and that we had at times not complied with Marketplace Rule 4310(c)(17) regarding submission of a Listing of Additional Shares form. On January 30, 2009, we responded to NASDAQ with a written response and requested an extension until February 27, 2009 to regain compliance with the minimum market capitalization requirement for The NASDAQ Capital Market. We are waiting for a decision from NASDAQ.

Even if we continued to be listed on The NASDAQ Capital Market, trading in our common stock may be halted or suspended due to market conditions or if NASDAQ, CONSOB or the Borsa Italiana determines that trading in our common stock is inadvisable. Trading in our common stock was halted indefinitely by the Borsa Italiana on February 10, 2009, and, as a consequence, trading in our common stock was halted by NASDAQ. CONSOB has requested additional information and clarification on our business operations and financial condition.

If our common stock ceases to be listed for trading on The NASDAQ Stock Market for any reason or if trading is halted or suspended, it may harm our stock price, increase the volatility of our stock price and make it more difficult for investors to buy or sell shares of our common stock, and/or cause the redemption of our Series A and Series D preferred stock and/or acceleration of our convertible notes. In addition, if we are not listed on The NASDAQ Stock Market and/or if our public float remains below $75 million, we will be limited in our ability to file new shelf registration statements on SEC Form S-3 and/or to fully use one or more registration statements on SEC Form S-3. We have relied significantly on shelf registration statements on SEC Form S-3 for most of our financings in recent years, so any such limitations may have a material adverse effect on our ability to raise the capital we need.

The global financial crisis may have an impact on our business and financial condition in ways that we currently cannot predict, and may further limit our ability to raise additional funds.

The continued credit crisis and related turmoil in the global financial system has had and may continue to have an impact on our business and our financial condition. We may face significant challenges if conditions in the financial markets do not improve or continue to worsen. In particular, our ability to access the capital markets and raise funds required for our operations may be severely restricted at a time when we would like, or need, to do so, which could have an adverse effect on our ability to meet our current and future funding requirements and on our flexibility to react to changing economic and business conditions.

We have received an audit report with a going concern disclosure on our consolidated financial statements.

Due to our need to raise additional financing to fund our operations and satisfy obligations as they become due, our independent registered public accounting firm has included an explanatory paragraph in their report on our December 31, 2007 consolidated financial statements regarding their substantial doubt as to our ability to continue as a going concern. This may have a negative impact on the trading price of our common stock and we may have a more difficult time obtaining necessary financing.

We are required to comply with the regulatory structure of Italy because our stock is traded on the MTA, which could result in administrative challenges.

Our stock is traded on the MTA stock market in Milan, Italy and we are required to also comply with the rules and regulations of CONSOB, which is the public authority responsible for regulating the Italian securities market

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and the Borsa Italiana, which ensures the development of the managed market in Italy. Collectively these agencies regulate companies listed on Italy s public markets. Conducting our operations in a manner that complies with all applicable laws and rules requires us to devote additional time and resources to regulatory compliance matters. For example, the process of seeking to understand and comply with the laws of each country, including tax, labor and regulatory laws, might require us to incur the expense of engaging additional outside counsel, accountants and other professional advisors and might result in delayed business initiatives as we seek to ensure that each new initiative will comply with all applicable regulatory regimes. In addition, the Borsa Italiana and CONSOB have made several requests for information asking us to provide additional clarifications about our business operations and financial condition, and we have complied with such requests and have met with CONSOB on several occasions to answer questions. Compliance with Italian regulatory requirements may delay additional issuances of our common stock; we are currently taking steps to attempt to conform to the requirements of the Italian stock exchange and CONSOB to allow such additional issuances.

In addition, under Italian law, we must publish a listing prospectus that has been approved by CONSOB prior to issuing common stock in any twelve-month period that exceeds 10% of the number of shares of common stock outstanding at the beginning of that period. We have attempted to publish a listing prospectus in Italy to cover our general offerings for the past year. We filed our initial listing prospectus with CONSOB in April 2007 and worked with CONSOB to meet their requirements to publish that listing prospectus for the remainder of 2007. We were finally able to publish a listing prospectus in January 2008, however, that listing prospectus was limited to shares to be issued to Société Générale under the Step-Up Equity Financing Agreement we entered into with Société Générale in 2006, which has since terminated. On December 31, 2008, we filed a new listing prospectus, which has not yet been published. As a result, we are required to raise money using alternative forms of securities; for example, we use convertible preferred stock and convertible debt in lieu of common stock as convertible preferred stock and convertible debt are not subject to the 10% limitation imposed by Italian law.

We are subject to additional legal duties, additional operational challenges and additional political and economic risks related to our operations in Italy.

A portion of our business is based in Italy. We are subject to duties and risks arising from doing business in Italy, such as:

- Italian employment law, including collective bargaining agreements negotiated at the national level and over which we have no control;
- European data protection regulations, under which we will be unable to send private personal data, including many employment records and some clinical trial data, from our Italian offices to our U.S. offices until our U.S. offices self-certify their adherence to the safe harbor framework established by the U. S. Department of Commerce in consultation with the European Commission;
- tariffs, customs, duties and other trade barriers; and
- capital controls, terrorism and other political risks.

We are also subject to the following operational challenges, among others, as a result of having a portion of our business and operations based in Italy:

- effectively pursuing the clinical development and regulatory approvals of all product candidates;
- successfully commercializing products under development;
- coordinating research and development activities to enhance introduction of new products and technologies;

coalescing the Italian business culture with our own and maintaining employee morale; and

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maintaining appropriate uniform standards, controls, procedures and policies relating to financial reporting and employment related matters, and the conduct of development activities that comply with both U.S. and Italian laws and regulations.

We may not succeed in addressing these challenges, risks and duties, any of which may be exacerbated by the geographic separation of our operations in the United States and in Italy. These risks related to doing business in Italy could harm the results of our operations.

In November 2007, we converted our Bresso, Italy subsidiary into a corporate branch to reduce expenses related to having a subsidiary in Milan. On February 6, 2009, we announced that we engaged the services of a strategic advisory consulting firm to assist in developing strategic options for a partnership, asset divestment or joint venture for our Bresso corporate branch.

Our operations in Italy make us subject to increased risk regarding currency exchange rate fluctuations.

As a result of operations in Italy, we are exposed to risks associated with foreign currency transactions insofar as we use U.S. dollars to make contract payments denominated in euros or vice versa. As the net positions of our foreign currency transactions might fluctuate, our earnings might be negatively affected. In addition, we are exposed to risks associated with the translation of euro-denominated financial results and accounts into U.S. dollars. Our reporting currency will remain as the U.S. dollar; however, a portion of our consolidated financial obligations will arise in euros. In addition, the carrying value of some of our assets and liabilities will be affected by fluctuations in the value of the U.S. dollar as compared to the euro. Changes in the value of the U.S. dollar as compared to the euro might have an adverse effect on our reported results of operations and financial condition.

We have reported material weaknesses in our internal control over financial reporting and if material weaknesses are discovered in the future, our stock price and investor confidence in us may be adversely affected.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. We identified that as of December 31, 2006 we had material weaknesses in our European branch relative to the effectiveness of our internal control over financial reporting which were remedied during 2007.

The existence of a material weakness is an indication that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. If we fail to maintain an effective system of internal controls, we may not be able to report our financial results accurately, which may deprive management of important financial information needed to manage the Company effectively, may cause investors to lose confidence in our reported financial information and may have an adverse effect on the trading price of our common stock.

If we are not able to successfully integrate recent and future acquisitions, our management s attention could be diverted, and efforts to integrate future acquisitions could consume significant resources.

The acquisitions of SM or any other future acquisition or business venture that we may undertake, involve numerous risks related to the integration of the acquired asset or entity. These risks include the following:

difficulties in integrating or coordinating the operations, technologies and products of the acquired companies;

difficulties in implementing internal controls over financial reporting;

diversion of management s attention from normal daily operations of the business;

inability to maintain the key business relationships and the reputations of acquired business;

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entry into markets in which we have limited or no prior experience and in which competitors have stronger market positions;

dependence on unfamiliar affiliates and partners;

reduction in the development or commercialization of existing products due to increased focus on the development or commercialization of the acquired products or the product developed and marketed by the joint venture;

responsibility for the liabilities of acquired business;

inability to maintain our internal standards, controls, procedures and policies at the acquired companies or business; and

potential loss of key employees of the acquired company.

Our investment in the joint venture with Spectrum is subject to risks beyond our control.

Our investment in the joint venture with Spectrum is subject to risks beyond our control. Because the business is operated through this joint venture arrangement in which we are only a 50% member, we do not unilaterally control the development and marketing of Zevalin and we are dependent on Spectrum to meet its obligations under the joint venture operating agreement, including making capital contributions and providing certain agreed upon services. If Spectrum should fail to perform under the operating agreement or the master services agreement between Spectrum and the joint venture, the operations and financial condition of the joint venture may be materially adversely affected, which could in turn lead to a default of the joint venture s obligations to Biogen, which would enable Biogen to foreclose on its security interest in the assets of the joint venture. This, in turn, could have a material adverse effect on our financial condition and results of operations.

If the joint venture is unable to expand label usage of Zevalin, or maintain or obtain improved reimbursement rates, the joint venture may not recognize the full value of the asset which would have an adverse effect on its expected financial and operating results and may in turn adversely affect our financial and operating results.

The joint venture intends to seek expansion of the approved uses, or labeled uses, of Zevalin in the United States. However, it may be unable to obtain approval for such label expansion in full or in part. If it is not able to obtain approval for expansion of the labeled uses for Zevalin, or if it is otherwise unable to fulfill its marketing, sales and distribution plans for Zevalin, we may not recognize the full anticipated value of Zevalin. If the joint venture is unable to expand the approved uses of Zevalin, our financial results for 2009 and in subsequent fiscal years may be adversely affected unless we are able to market and sell other products. In June 2008, we entered into an agreement with Bayer Schering for access to data from their first line indolent trial, or FIT trial. Although we submitted an sBLA based on the FIT trial data in September of 2008, there can be no guarantee that such data will be adequate or suitable for approval of the sBLA by the FDA.

In 2007, the Centers for Medicare and Medicaid Services, or CMS, implemented new outpatient reimbursement rates to be put in place in 2008 for radiopharmaceuticals, including Zevalin. These new reimbursement rates are significantly below the institution or provider s acquisition cost for Zevalin. Congress passed legislation in late 2007 to delay the implementation of those new rates and stabilize reimbursement rates for the first six months of 2008 and subsequently passed legislation in July 2008 to extend that delay an additional 18 months, to January 1, 2010, with the intention of giving drug manufacturers and CMS more time to reach an agreement that more adequately reflects hospitals costs associated with the therapy. However, there can be no guarantee that CMS will agree to a rate or methodology that provides an acceptable reimbursement on radiopharmaceuticals such as Zevalin. In the event that CMS does not agree to a reimbursement rate that is adequate to cover an institution or provider s acquisition cost for Zevalin, we may face immediate and significant difficulty in getting care providers to use Zevalin, which would have an adverse impact on the joint venture s expected financial and operating results, and in turn may adversely impact our financial and operating results.

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We may not realize any royalties, milestone payments or other benefits under the License and Co-Development Agreement entered into with Novartis Pharmaceutical Company Ltd.

We have entered into a License and Co-Development agreement related to OPAXIO and pixantrone with Novartis International Pharmaceutical Ltd., or Novartis, pursuant to which Novartis received an exclusive worldwide license for the development and commercialization of OPAXIO and an option to enter into an exclusive worldwide license to develop and commercialize pixantrone. We will not receive any royalty or milestone payments under this agreement unless Novartis elects to participate in the development and commercialization of OPAXIO or if Novartis exercises its option related to pixantrone and we are able to reach a definitive agreement. Novartis is under no obligation to make such election or exercise such right and may never do so. In addition, even if Novartis exercises such rights, any royalties and milestone payments we may be eligible to receive from Novartis are subject to the receipt of the necessary regulatory approvals and the attainment of certain sales levels. We may never receive the necessary regulatory approvals and our products may not reach the necessary sales levels. Novartis has the right under the agreement in its sole discretion to terminate such agreement at any time on written notice to us.

We may be delayed, limited or precluded from obtaining regulatory approval of OPAXIO given that our three STELLAR phase III clinical trials for the treatment of non-small cell lung cancer did not meet their primary endpoints.

There are no guarantees that we will obtain regulatory approval to manufacture, market, or expand the marketing of any of our drug candidates. Obtaining regulatory approval to market drugs to treat cancer is expensive, difficult and risky. Preclinical and clinical data can be interpreted in different ways, which could delay, limit or preclude regulatory approval. Negative or inconclusive results or adverse medical events during a clinical trial could delay, limit or prevent regulatory approval.

Our future financial success depends in part on obtaining regulatory approval of OPAXIO. In March 2005, we announced the results of STELLAR 3, and in May 2005, we announced the results of STELLAR 2 and 4, our phase III clinical trials of OPAXIO in non-small cell lung cancer. All three trials failed to achieve their primary endpoints of superior overall survival compared to current marketed agents for treating NSCLC.

In December 2006, we closed the PIONEER clinical trial and in 2007, we initiated a new study in the United States, PGT307, which focuses on the primary efficacy endpoint of survival in women with NSCLC and pre-menopausal estrogen levels. We have decided not to initiate an additional study, the PGT306 trial, for which we have submitted a special protocol assessment, or SPA, to conserve limited financial resources. We also feel that compelling evidence from one trial, the PGT307 trial, along with supporting evidence from earlier clinical trials, may be adequate to submit an NDA for OPAXIO even though the FDA has established a requirement that two adequate and well-controlled pivotal studies demonstrating a statistically significant improvement in overall survival will be required for approval of OPAXIO in the NSCLC setting. We may not receive compelling evidence or any positive results from the PGT307 trial, which would preclude our planned submission of an NDA to the FDA, and would preclude us from marketing OPAXIO in the United States.

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Based on discussions with the EMEA Scientific Advice Working Party, we submitted an MAA for OPAXIO in Europe on March 4, 2008 based on results of the STELLAR trials. The MAA was accepted for review by the EMEA in April 2008, however a successful regulatory outcome from the EMEA is not assured as the EMEA s final opinion cannot be predicted until they have had the opportunity to complete a thorough review of the clinical data that was presented in the MAA. We expect to receive an opinion from the EMEA by June 2009.

We are subject to extensive government regulation.

We are subject to rigorous and extensive regulation by the FDA in the United States and by comparable agencies in other states and countries. Failure to comply with regulatory requirements could result in various adverse consequences, including possible delay in approval or refusal to approve a product, withdrawal of approved products from the market, product seizures, injunctions, regulatory restrictions on our business and sales activities, monetary penalties, or criminal prosecution.

Our products may not be marketed in the United States until they have been approved by the FDA and may not be marketed in other countries until they have received approval from the appropriate agencies. None of our current products has received approval, although Zevalin, which was transferred to the joint venture in December 2008, has received FDA approval. Obtaining regulatory approval requires substantial time, effort and financial resources, and we may not be able to obtain approval of any of our products on a timely basis, or at all. If our products are not approved quickly enough to provide net revenues to defray our debt and operating expenses, our business and financial condition will be adversely affected.

We and the joint venture are subject to numerous regulations and statutes regulating the manner of selling and obtaining reimbursement for our products that receive marketing approval. For example, federal statutes generally prohibit providing certain discounts and payments to physicians to encourage them to prescribe our product. Violations of such regulations or statutes may result in treble damages, criminal or civil penalties, fines or exclusion of CTI or its employees from participation in federal and state health care programs. Although we have policies prohibiting violations of relevant regulations and statutes, unauthorized actions of our employees or consultants, or unfavorable interpretations of such regulations or statutes may result in third parties or regulatory agencies bringing legal proceedings or enforcement actions against us. Because our sales force is relatively new, we may have a greater risk of such violations from lack of adequate training or experience. The expense to retain and pay legal counsel and consultants to defend against any such proceedings would be substantial, and together with the diversion of management s time and attention to assist in any such defense, may negatively affect our financial condition and results of operations.

In addition, both before and after approval, our contract manufacturers and our products are subject to numerous regulatory requirements covering, among other things, testing, manufacturing, quality control, labeling, advertising, promotion, distribution and export. Manufacturing processes must conform to current Good Manufacturing Practice, or cGMPs. The FDA and other regulatory authorities periodically inspect manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money and effort to maintain compliance. Failure to comply with FDA, EMEA or other applicable regulations may cause us to curtail or stop the manufacture of such products until we obtain regulatory compliance.

The marketing and promotion of pharmaceuticals is also heavily regulated, particularly with regard to prohibitions on the promotion of products for off-label uses. In April 2007, we paid a civil penalty of $10.5 million and entered into a settlement agreement with the United States Attorney s Office, or USAO, for the Western District of Washington arising out of their investigation into certain of our prior marketing practices relating to TRISENOX, which was divested to Cephalon Inc. in July 2005. As part of that settlement agreement, and in connection with the acquisition of Zevalin we also entered into a corporate integrity agreement with the Office of Inspector General of the U.S. Department of Health and Human Services that requires us to establish a compliance committee and compliance program and adopt a formal code of conduct. The USAO settlement did not address separate claims brought against us by the private party plaintiff in this matter, which generally relate to attorney s fees and employment related claims. In 2007, the United States District Court dismissed the private party plaintiff s employment claims as barred by applicable statutes of limitation. The private party plaintiff filed a petition for attorney s fees and costs in the approximate amount of $1.2 million on July 31, 2008. By settlement agreement dated as of January 28, 2009, we agreed to pay $494,500 to settle all outstanding claims of the private party plaintiff for attorneys fees and expenses. This agreement fully and finally resolves all remaining claims in this civil action. Our separate action seeking indemnification for all losses incurred in the qui tam action is pending in the Ninth Circuit Court of Appeals.

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We may face difficulties in achieving broader market acceptance of Zevalin if we and/or Spectrum do not invest significantly in our sales and marketing infrastructure.

We and Spectrum market Zevalin through the joint venture using a combined direct sales force. U.S. sales of Zevalin by Biogen either declined or remained flat over the past several years. We believe that a sales and marketing strategy, in conjunction with efforts to obtain approval by the FDA for expanded uses of Zevalin, will increase sales of and revenue from Zevalin over the next few years. The sales and marketing strategy intends to take advantage of the recent lowering of barriers to adoption, including greater economic incentives and practice efficiencies for Zevalin compared to rituximab, the recent adoption of positron emission tomography in community oncology practices, which facilitates use of Zevalin, and implementation of a Zevalin community access program, which targets facilitation of on-site ordering, receipt and administration of Zevalin by the 100 largest community oncology group practices. However, implementation of the sales and marketing strategy by the joint venture will require an investment of resources by us and Spectrum and may not increase Zevalin revenues according to forecasts. In addition, creation and expansion of an effective sales force may take time, and competition for sales and marketing personnel in this industry is intense. The combined sales force will need to be effectively managed and expanded and the sales and marketing infrastructure expanded in order to achieve broader market acceptance and additional sales revenue from Zevalin.

The joint venture relies on third parties for the manufacture and supply of Zevalin and for the manufacture and supply of radioactive isotopes used in the administration of Zevalin.

Biogen currently manufactures and supplies Zevalin to the joint venture through a long-term supply agreement, and Biogen may, in turn, rely on other third-party manufacturers to fill its requirements for manufacturing Zevalin. Biogen may accelerate the end of the term of the supply agreement in the event of a mid-term manufacturing technology transfer. If Biogen or any third party contract manufacturing organization, or CMO, or contract service provider, or CSP, upon which it relies does not produce or test and release Zevalin in sufficient quantities and on a timely and cost-effective basis, or if Biogen or any third party CMO or CSP does not obtain and maintain all required manufacturing approvals, the joint venture s business could be harmed, which could in turn materially and adversely impact our financial condition and results of operations. In addition, the joint venture relies on MDS Nordion (MDS Canada) for the manufacture and supply of Yttrium-90, a radioactive isotope used in the administration of Zevalin therapy. MDS Nordion (MDS Canada) is currently the joint venture s sole source of Yttrium-90, which must be manufactured and shipped in such a way as to ensure the appropriate potency of the isotope based on its radioactive half-life at the time of administration of the therapeutic dose to the patient is valid. If MDS Nordion (MDS Canada) were to have problems with the manufacture or supply of Yttrium-90, the joint venture s business could be materially impacted, which could in turn materially and adversely impact our financial condition and results of operations, and it may not be able to qualify an additional supplier of the isotope on acceptable terms or at all. The joint venture also relies on Coridien/Mallinckrodt and GE for the manufacture and supply of Indium-111, a radioactive isotope used in the administration of Zevalin diagnostic for clinical purposes. Coridien/Mallinckrodt and GE are currently the joint venture s two qualified sources of Indium-111, which must be manufactured and shipped in such a way as to ensure the appropriate potency of the isotope based on its radioactive half-life at the time of administration of the diagnostic dose to the patient. If both companies were to have problems with the manufacture or supply of Indium-111, the joint venture s business could be materially impacted, and the joint venture may not be able to find an additional supplier of the isotope on acceptable terms or at all.

We face direct and intense competition from our competitors in the biotechnology and pharmaceutical industries, and we may not compete successfully against them.

Competition in the oncology market is intense and is accentuated by the rapid pace of technological development. We anticipate that we will face increased competition in the future as new companies enter the market. Our competitors in the United States and elsewhere are numerous and include, among others, major multinational pharmaceutical companies, specialized biotechnology companies and universities and other research institutions. Specifically:

Zevalin currently competes with Bexxar®, which is marketed by GlaxoSmithKline, and any rituximab-containing chemotherapy regimen. Rituximab is marketed in the U.S. by Genentech and Biogen Idec. In addition, other companies such as Cephalon, Eli Lilly, Genta, Genmab, Favrille, and Genitope are developing products which could compete with Zevalin.

If we are successful in bringing OPAXIO to market, we will face direct competition from oncology-focused multinational corporations. OPAXIO will compete with other taxanes. Many oncology-focused multinational corporations currently market or are developing taxanes, epothilones, and other cytotoxic agents, which inhibit cancer cells by a mechanism similar to taxanes, or similar products including, among others, Bristol-Myers Squibb Co. and others, which markets paclitaxel and generic forms of paclitaxel;

Aventis, which markets docetaxel; Genentech, Roche and OSI Pharmaceuticals, which markets Tarceva ; Genentech and Roche, which markets Avastin , Eli Lilly, which markets Alimta, and American Pharmaceutical Partners, which markets Abraxane . In addition, other companies such as NeoPharm Inc. and Telik, Inc. are also developing products which could compete with OPAXIO.

Because pixantrone is intended to provide less toxic treatment to patients who have failed standard chemotherapy treatment, if pixantrone is brought to market, it is not expected to compete directly with many existing chemotherapies. However, pixantrone will face competition from currently marketed anthracyclines, such as mitoxantrone (Novantrone®), and new anti-cancer drugs with reduced toxicity that may be developed and marketed.

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If we are successful in bringing brostallicin to market, we will face direct competition from other minor groove binding agents including Yondelis®, which is currently developed by PharmaMar and has received Authorization of Commercialization from the European Commission for soft tissue sarcoma.

Many of our competitors, either alone or together with their collaborators and, in particular, the multinational pharmaceutical companies, have substantially greater financial resources and development and marketing teams than us. In addition, many of our competitors, either alone or together with their collaborators, have significantly greater experience than we do in developing, manufacturing and marketing products. As a result, these companies products might come to market sooner or might prove to be more effective, less expensive, have fewer side effects or be easier to administer than ours. In any such case, sales of our products or eventual products would likely suffer and we might never recoup the significant investments we are making to develop these product candidates.

Uncertainty regarding third-party reimbursement and healthcare cost containment initiatives may limit our returns.

The ongoing efforts of governmental and third-party payors to contain or reduce the cost of healthcare may affect our ability to commercialize our products successfully. Governmental and other third-party payors continue to attempt to contain healthcare costs by:

challenging the prices charged for health care products and services,

limiting both coverage and the amount of reimbursement for new therapeutic products,

denying or limiting coverage for products that are approved by the FDA but are considered experimental or investigational by third-party payors,

refusing in some cases to provide coverage when an approved product is used for disease indications in a way that has not received FDA marketing approval, and

denying coverage altogether.

The trend toward managed healthcare in the United States, the growth of organizations such as health maintenance organizations, and legislative proposals to reform healthcare and government insurance programs could significantly influence the purchase of healthcare services and products, resulting in lower prices and reducing demand for our products. In addition, in almost all European markets, pricing and choice of prescription pharmaceuticals are subject to governmental control. Therefore, the price of our products and their reimbursement in Europe will be determined by national regulatory authorities.

Even if we succeed in bringing any of our proposed products to the market, they may not be considered cost-effective and third-party reimbursement might not be available or sufficient. If adequate third-party coverage is not available, we may not be able to maintain price levels sufficient to realize an appropriate return on our investment in research and product development. As discussed above, CMS proposed new rates for 2008 for Zevalin that, if implemented, would result in reimbursement significantly rates below the institution s or provider s acquisition cost for Zevalin. In addition, legislation and regulations affecting the pricing of pharmaceuticals may change in ways adverse to us before or after any of our proposed products are approved for marketing.

Even if our drug candidates are successful in clinical trials, we may not be able to successfully commercialize them.

Since our inception in 1991, we have dedicated substantially all of our resources to the research and development of our technologies and related compounds. All of our compounds currently are in research or development, and have not received marketing approval.

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Prior to commercialization, each product candidate requires significant research, development and preclinical testing and extensive clinical investigation before submission of any regulatory application for marketing approval. The development of anti-cancer drugs, including those we are currently developing, is unpredictable and subject to numerous risks. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons including that they may:

- be found ineffective or cause harmful side effects during preclinical testing or clinical trials,
- fail to receive necessary regulatory approvals,
- be difficult to manufacture on a scale necessary for commercialization,
- be uneconomical to produce,
- fail to achieve market acceptance, or
- be precluded from commercialization by proprietary rights of third parties.

The occurrence of any of these events could adversely affect the commercialization of our products. Products, if introduced, may not be successfully marketed and/or may not achieve customer acceptance. If we fail to commercialize products or if our future products do not achieve significant market acceptance, we will not likely generate significant revenues or become profitable.

The intellectual property and assets related to Zevalin are subject to a security agreement with Biogen; if the joint venture were to default on certain payments or reimbursement owed to Biogen or certain third parties, those assets would be subject to foreclosure by Biogen and the joint venture could lose its ability to continue development, sales and marketing activities with respect to Zevalin. Additionally, if we were to default on certain obligations to Biogen, our 50% membership interest in the joint venture would be subject to foreclosure by Biogen.

On December 21, 2007, in connection with our purchase of Zevalin, we entered into a security agreement with Biogen granting a first priority security interest to Biogen in all of our right, title and interest (a) in and to the assets related to Zevalin that we purchased from Biogen, together with any other assets or rights related to any of such assets or otherwise used in the development, manufacture or commercialization of Zevalin, and (b) under certain license, sublicense and supply agreements entered into in connection with our purchase of Zevalin. In connection with and as a condition to the transfer of Zevalin to the joint venture, the joint venture entered into a security agreement with Biogen pursuant to which the joint venture granted to Biogen a first priority security interest in all of the joint venture s assets, including the assets contributed to the joint venture by us in connection with the closing of the joint venture transaction, to secure certain payment, indemnification and other obligations of the joint venture to Biogen. In the event the joint venture were to default on certain of its obligations under the security agreement, the assigned asset purchase agreement pursuant to which the joint venture continues to owe royalties and milestone payments to Biogen, or the related sublicense and service agreements, or in the event the joint venture were to make an application for, or consent to, the appointment of a receiver, trustee or liquidator of all or a substantial portion of its assets, transfer its assets as part of a general assignment or other arrangement for the benefit of creditors, become insolvent, file a voluntary or involuntary petition under the provisions of the United States Bankruptcy Code, or in the event of an attachment or execution upon, or seizure of, all or substantially all of its assets, Biogen may take any action with respect to the collateral under the security agreement that it deems necessary or advisable to accomplish the purposes of the security agreement. The security agreement will remain in effect until all obligations secured by that agreement have been satisfied. In addition, the original security agreement between us and Biogen was amended and restated, and under its terms, Biogen continues to have first priority security interest in any Zevalin related assets we own, namely, our 50% membership interest in the joint venture and all rights and benefits under the joint venture operating agreement. If Biogen were to foreclose on the collateral under the security agreement with the joint venture or under the security agreement with us, our business would be materially adversely impacted.

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If any of our license agreements for intellectual property underlying pixantrone, OPAXIO, brostallicin, or any other products are terminated, or the joint venture s license agreement for intellectual property underlying Zevalin is terminated, we or the joint venture may lose the right to develop or market that product.

We have licensed intellectual property, including patent applications relating to intellectual property for pixantrone and brostallicin and the joint venture has licensed intellectual property, including patent applications relating to the intellectual property for Zevalin. We have also in-licensed the intellectual property for our drug delivery technology relating to OPAXIO that uses polymers that are linked to drugs, known as polymer-drug conjugates. Some of our product development programs depend on our ability to maintain rights under these licenses. Each licensor has the power to terminate its agreement with us or the joint venture if we fail to meet our obligations under these licenses. We may not be able to meet our obligations under these licenses. If we or the joint venture defaults under any license agreements, we or the joint venture, as the case may be, may lose our or its right to market and sell any products based on the licensed technology.

If we fail to adequately protect our intellectual property, our competitive position could be harmed.

Development and protection of our intellectual property are critical to our business. If we do not adequately protect our intellectual property, competitors may be able to practice our technologies. Our success depends in part on our ability to:

- obtain patent protection for our products or processes both in the United States and other countries,
- protect trade secrets, and
- prevent others from infringing on our proprietary rights.

When polymers are linked, or conjugated, to drugs, the results are referred to as polymer-drug conjugates. We are developing drug delivery technology that links chemotherapy to biodegradable polymers. For example, OPAXIO is paclitaxel, the active ingredient in Taxol®, one of the world s best selling cancer drugs, linked to polyglutamate. We may not receive a patent for all of our polymer-drug conjugates and we may be challenged by the holder of a patent covering the underlying drug and/or methods for its use or manufacture.

The patent position of biopharmaceutical firms generally is highly uncertain and involves complex legal and factual questions. The U.S. Patent and Trademark Office has not established a consistent policy regarding the breadth of claims that it will allow in biotechnology patents. If it allows broad claims, the number and cost of patent interference proceedings in the United States and the risk of infringement litigation may increase. If it allows narrow claims, the risk of infringement may decrease, but the value of our rights under our patents, licenses and patent applications may also decrease. Patent applications in which we have rights may never issue as patents and the claims of any issued patents may not afford meaningful protection for our technologies or products. In addition, patents issued to us or our licensors may be challenged and subsequently narrowed, invalidated or circumvented. Litigation, interference proceedings or other governmental proceedings that we may become involved in with respect to our proprietary technologies or the proprietary technology of others could result in substantial cost to us. Patent litigation is widespread in the biotechnology industry, and any patent litigation could harm our business. Costly litigation might be necessary to protect a patent position or to determine the scope and validity of third-party proprietary rights, and we may not have the required resources to pursue any such litigation or to protect our patent rights. Any adverse outcome in litigation with respect to the infringement or validity of any patents owned by third parties could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using a product or technology.

We also rely upon trade secrets, proprietary know-how and continuing technological innovation to remain competitive. Third parties may independently develop such know-how or otherwise obtain access to our technology. While we require our employees, consultants and corporate partners with access to proprietary information to enter into confidentiality agreements, these agreements may not be honored.

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Our products could infringe on the intellectual property rights of others, which may cause us to engage in costly litigation and, if unsuccessful, could cause us to pay substantial damages and prohibit us from selling our products.

We attempt to monitor patent filings but have not conducted an exhaustive search for patents that may be relevant to our products and product candidates in an effort to guide the design and development of our products to avoid infringement. We may not be able to successfully challenge the validity of these patents and could have to pay substantial damages, possibly including treble damages, for past infringement and attorneys fees if it is ultimately determined that our products infringe a third party s patents. Further, we may be prohibited from selling our products before we obtain a license, which, if available at all, may require us to pay substantial royalties. Moreover, third parties may challenge the patents that have been issued or licensed to us. Even if infringement claims against us are without merit, or if we challenge the validity of issued patents, lawsuits take significant time, may be expensive and may divert management attention from other business concerns.

We may be unable to obtain a quorum for meetings of our shareholders or obtain necessary shareholder approvals and therefore be unable to take certain corporate actions.

Our articles require that a quorum, consisting of one-third of the outstanding shares of voting stock, be represented in person or by proxy in order to transact business at a meeting of our shareholders. In addition, amendments to our articles, such as an amendment to increase our authorized capital stock, require the approval of a majority of our outstanding shares. A substantial majority of our common shares are held by Italian institutions and under Italian laws and regulations, it is difficult to communicate with the beneficial holders of those shares to obtain votes. In 2006, when a quorum required a majority of the outstanding shares of our voting stock be represented in person or by proxy, we scheduled two annual meetings of shareholders but were unable to obtain quorum at either meeting. Following that failure to obtain quorum, we contacted certain depository banks in Italy where significant numbers of shares of our common stock were held and asked them to cooperate by making a book entry transfer of their share positions at Monte Titoli to their U.S. correspondent bank, who would then transfer the shares to an account of the Italian bank at a U.S. broker-dealer that is an affiliate of that bank. Certain of the banks contacted agreed to make the share transfer pursuant to these arrangements as of the record date of the meeting, subject to the relevant beneficial owner taking no action to direct the voting of such shares. Under Rule 452 of the New York Stock Exchange, the U.S. broker-dealer may vote shares absent direction from the beneficial owner on certain matters, such as the uncontested election of directors, an amendment to our articles of incorporation to increase authorized shares that are to be used for general corporate purposes, and the ratification of our auditors. As a result of this custody transfer, we were able to hold special meetings of the shareholders in April 2007 and January 2008 and annual meetings of the shareholders in September 2007 and June 2008. At the meeting in June 2008, our shareholders approved a proposal to reduce our quorum requirement from a majority of outstanding voting shares to one-third of outstanding voting shares. However, obtaining a quorum at future meetings even at the lower threshold and obtaining necessary shareholder approvals will depend in part upon the willingness of the Italian depository banks to continue participating in the custody transfer arrangements, and we cannot be assured that those banks that have participated in the past will continue to participate in custody transfer arrangements in the future. We are continuing to explore other alternatives to achieve quorum for and shareholder representation at our meetings, however, we cannot be certain that we will find an alternate method if we are unable to continue to use the custody transfer arrangements. As a result, we may be unable to obtain quorum at future annual or special meetings of shareholders or obtain shareholder approval of proposals when needed.

If we are unable to obtain a quorum at our shareholder meetings and thus fail to get shareholder approval of corporate actions, such failure could have a materially adverse effect on us. In addition, brokers may only vote on those matters for which broker discretionary voting is allowed under Rule 452, and we may not be able to obtain the required number of votes to approve certain proposals that require a majority of all outstanding shares to approve the proposal due to our reliance on broker discretionary voting. Therefore it is possible that even if we are able to obtain a quorum for our meetings of the shareholders we still may not receive enough votes to approve proxy proposals presented at such meeting and, depending on the proposal in question, such failure could have a materially adverse effect on us.

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We could fail in financing efforts or be delisted from NASDAQ if we fail to receive shareholder approval when needed.

We are required under the NASDAQ Marketplace Rules to obtain shareholder approval for any issuance of additional equity securities that would comprise more than 20% of our total shares of common stock outstanding before the issuance of the securities at a discount to the greater of book or market value in an offering that is not deemed to be a public offering by NASDAQ. Funding of our operations in the future may require issuance of additional equity securities that would comprise more than 20% of our total shares of common stock outstanding, but we might not be successful in obtaining the required shareholder approval for such an issuance, particularly in light of the difficulties we have experienced in obtaining a quorum and holding shareholder meetings as outlined above.

We may be unable to obtain the raw materials necessary to produce our OPAXIO product candidate in sufficient quantity to meet demand when and if such product is approved.

We may not be able to continue to purchase the materials necessary to produce OPAXIO, including paclitaxel, in adequate volume and quality. Paclitaxel is derived from certain varieties of yew trees and the supply of paclitaxel is controlled by a limited number of companies. Paclitaxel is available and we have purchased it from several sources. We purchase the raw materials paclitaxel and polyglutamic acid from a single source on a purchase order basis. Should the paclitaxel or polyglutamic acid purchased from our sources prove to be insufficient in quantity or quality, should a supplier fail to deliver in a timely fashion or at all, or should these relationships terminate, we may not be able to obtain a sufficient supply from alternate sources on acceptable terms, or at all.

Our dependence on third-party manufacturers means that we do not always have direct control over the manufacture, testing or distribution of our products.

We do not currently have internal analytical laboratory or manufacturing facilities to allow the testing or production and distribution of drug products in compliance with cGMPs. Because we do not directly control our suppliers, these vendors may not be able to provide us with finished product when we need it.

We will be dependent upon these third parties to supply us in a timely manner with products manufactured in compliance with cGMPs or similar manufacturing standards imposed by US and/or foreign regulatory authorities where our products will be tested and/or marketed. While the FDA and other regulatory authorities maintain oversight for cGMP compliance of drug manufacturers, contract manufacturers may at times violate cGMPs. The FDA and other regulatory authorities may take action against a contract manufacturer who violates cGMPs. One of our products under development, OPAXIO, has a complex manufacturing process, which may prevent us from obtaining a sufficient supply of drug product for the clinical trials and commercial activities currently planned or underway on a timely basis, if at all. The active pharmaceutical ingredients and finished products for pixantrone and brostallicin are both manufactured by a single vendor. The drug substance for Zevalin is produced under contract by Biogen and the drug product and finished product is manufactured and distributed at a contract manufacturer and contract distribution facility.

If we do not successfully develop additional products, we may be unable to generate significant revenue or become profitable.

We divested our commercial product, TRISENOX, in July 2005 and only acquired a new commercial product, Zevalin, in December 2007, which we transferred to the joint venture in December 2008. The joint venture s ability to generate significant revenues from Zevalin is dependent in part on its ability to find new markets for the product, including through gaining wider acceptance and use of the drug by physicians and through FDA approval of expanded uses for the product. There is no guarantee that it will be successful in accomplishing either of these goals. Additionally, pixantrone, OPAXIO and brostallicin are currently in clinical trials and may not be successful. For example, our STELLAR phase III clinical trials for OPAXIO for the treatment of non-small cell lung cancer failed to meet their primary endpoints. A number of companies in the pharmaceutical industry, including us, have suffered significant setbacks in advanced clinical trials, even after reporting promising results in earlier trials. We will need to commit significant time and resources to develop this and additional product candidates. Our product candidates will be successful only if:

- our product candidates are developed to a stage that will enable us to commercialize them or sell related marketing rights to pharmaceutical companies;

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- we are able to commercialize product candidates in clinical development or sell the marketing rights to third parties; and

- our product candidates, if developed, are approved by the regulatory authorities.

We are dependent on the successful completion of these goals in order to generate revenues. The failure to generate such revenues may preclude us from continuing our research and development of these and other product candidates.

If we are unable to enter into new licensing arrangements, our future product portfolio and potential profitability could be harmed.

One component of our business strategy is in-licensing drug compounds developed by other pharmaceutical and biotechnology companies or academic research laboratories. All of our product candidates in clinical development are in-licensed from a third party, including pixantrone, OPAXIO, and brostallicin.

Competition for new promising compounds and commercial products can be intense. If we are not able to identify future in-licensing opportunities and enter into future licensing arrangements on acceptable terms, our future product portfolio and potential profitability could be harmed.

We may take longer to complete our clinical trials than we expect, or we may not be able to complete them at all.

Before regulatory approval for any potential product can be obtained, we must undertake extensive clinical testing on humans to demonstrate the safety and efficacy of the product. Although for planning purposes we forecast the commencement and completion of clinical trials, the actual timing of these events can vary dramatically due to a number of factors. On March 4, 2008, we submitted an MAA to the EMEA for OPAXIO. In April 2008, the EMEA accepted the MAA for review, however, we do not expect a regulatory decision on an MAA prior to mid 2009. We expect to begin submission of a rolling New Drug Application (NDA) and request priority review for pixantrone to treat relapsed aggressive NHL in the first quarter of 2009. We may not obtain authorization to permit product candidates that are already in the preclinical development phase to enter the human clinical testing phase. Authorized preclinical or clinical testing may not be completed successfully within any specified time period by us, or without significant additional resources or expertise to those originally expected to be necessary. Many drugs in human clinical trials fail to demonstrate the desired safety and efficacy characteristics. Clinical testing may not show potential products to be safe and efficacious and potential products may not be approved for a specific indication. Further, the results from preclinical studies and early clinical trials may not be indicative of the results that will be obtained in later-stage clinical trials. Data obtained from clinical trials are susceptible to varying interpretations. Government regulators and our collaborators may not agree with our interpretation of our clinical trial results. In addition, we or regulatory authorities may suspend clinical trials at any time on the basis that the participants are being exposed to unacceptable health risks or for other reasons. Completion of clinical trials depends on, among other things, the number of patients available for enrollment in a particular trial, which is a function of many factors, including the number of patients with the relevant conditions, the nature of the clinical testing, the proximity of patients to clinical testing centers, the eligibility criteria for tests as well as competition with other clinical testing programs involving the same patient profile but different treatments.

We have limited experience in conducting clinical trials. We expect to continue to rely on third parties, such as contract research organizations, academic institutions and/or cooperative groups, to conduct, oversee and monitor clinical trials as well as to process the clinical results and manage test requests, which may result in delays or failure to complete trials if the third parties fail to perform or to meet the applicable standards.

If we fail to commence or complete, need to perform more or larger clinical trials than planned or experience delays in any of our present or planned clinical trials, our development costs may increase and/or our ability to commercialize our product candidates may be adversely affected. If delays or costs are significant, our financial results and our ability to commercialize our product candidates may be adversely affected.

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If we fail to establish and maintain collaborations or if our partners do not perform, we may be unable to develop and commercialize our product candidates.

We have entered into collaborative arrangements with third-parties to develop and/or commercialize product candidates and are currently seeking additional collaborations. For example, we entered into an agreement with the Gynecologic Oncology Group to perform a phase III trial of OPAXIO in patients with ovarian cancer. Additional collaborations might be necessary in order for us to fund our research and development activities and third-party manufacturing arrangements, seek and obtain regulatory approvals and successfully commercialize our existing and future product candidates. If we fail to enter into additional collaborative arrangements or fail to maintain our existing collaborative arrangements, the number of product candidates from which we could receive future revenues would decline. For example, in 2005 we sold our product TRISENOX to Cephalon and, pursuant to the terms of the purchase agreement under which TRISENOX was sold, we are entitled to receive milestone payments upon the approval by the FDA of new labeled uses for TRISENOX, however, Cephalon may decide not to submit any additional information to the FDA to apply for label expansion of TRISENOX, in which case we would not receive a milestone payment under the agreement.

Our dependence on collaborative arrangements with third parties will subject us to a number of risks that could harm our ability to develop and commercialize products, including that:

- collaborative arrangements may not be on terms favorable to us;
- disagreements with partners may result in delays in the development and marketing of products, termination of our collaboration agreements or time consuming and expensive legal action;
- we cannot control the amount and timing of resources partners devote to product candidates or their prioritization of product candidates and partners may not allocate sufficient funds or resources to the development, promotion or marketing of our products, or may not perform their obligations as expected;
- partners may choose to develop, independently or with other companies, alternative products or treatments, including products or treatments which compete with ours;
- agreements with partners may expire or be terminated without renewal, or partners may breach collaboration agreements with us;
- business combinations or significant changes in a partner s business strategy might adversely affect that partner s willingness or ability to complete its obligations to us; and
- the terms and conditions of the relevant agreements may no longer be suitable.

The occurrence of any of these events could adversely affect the development or commercialization of our products.

Because we base several of our drug candidates on unproven technologies, we may never develop them into commercial products.

We base several of our product candidates upon novel technologies that we are using to develop drugs for the treatment of cancer. These technologies have not been proven. Furthermore, preclinical results in animal studies may not predict outcomes in human clinical trials. Our product candidates may not be proven safe or effective. If these technologies do not work, our drug candidates will not develop into commercial products.

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Because there is a risk of product liability associated with our products, we face potential difficulties in obtaining insurance.

Our business exposes us to potential product liability risks inherent in the testing, manufacturing, marketing and sale of human pharmaceutical products, and we may not be able to avoid significant product liability exposure. While the joint venture has insurance covering the marketing and sales of Zevalin and we have insurance covering the product use in our clinical trials for our product candidates, it is possible that the joint venture and we will not be able to maintain such insurance on acceptable terms or that any insurance obtained will not provide adequate coverage against potential liabilities. Our inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or limit the commercialization of Zevalin or any products we develop. A successful product liability claim in excess of our insurance coverage could exceed our net worth.

Adverse events related to Zevalin can negatively impact product sales and the joint venture s results from operations.

The joint venture s commercial product, Zevalin, has the possibility of causing significant side effects in patients, and deaths associated with an infusion reaction symptom complex, though rare, have occurred within 24 hours of infusions of rituximab, a component of Zevalin. In addition, Yttrium-90 Zevalin administration often results in severe and prolonged cytopenias in most patients, while severe cutaneous and mucocutaneous reactions have also been reported. While side effects are common in oncology drugs, adverse events such as these could negatively impact sales of Zevalin, which in turn could negatively impact the joint venture s results from operations, which could in turn negatively impact our results of operations.

Since we use hazardous materials in our business, we may be subject to claims relating to improper handling, storage or disposal of these materials.

Our research and development activities involve the controlled use of hazardous materials, chemicals and various radioactive compounds. We are subject to international, federal, state, and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by the regulations, the risk of accidental contamination or injury from these materials cannot be eliminated completely. In the event of such an accident, we could be held liable for any damages that result and any such liability not covered by insurance could exceed our resources. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development or production efforts.

We may not be able to conduct animal testing in the future, which could harm our research and development activities.

Certain of our research and development activities involve animal testing. Such activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting activities through protests and other means. To the extent the activities of these groups are successful, our business could be materially harmed by delaying or interrupting our research and development activities.

Risks Related To the Securities Markets

Our stock price is extremely volatile, which may affect our ability to raise capital in the future and may subject the value of your investment in our securities to sudden decreases.

The market price for securities of biopharmaceutical and biotechnology companies, including ours, historically has been highly volatile, and the market from time to time has experienced significant price and volume fluctuations that are unrelated to the operating performance of such companies. For example, during the twelve month period ended February 13, 2009, our stock price has ranged from a low of $0.05 to a high of $14.60. Fluctuations in the trading price or liquidity of our common stock may adversely affect the value of your investment in our common stock.

Factors that may have a significant impact on the market price and marketability of our securities include:

announcements by us or others of results of preclinical testing and clinical trials and regulatory actions;

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announcements of technological innovations or new commercial therapeutic products by us, our collaborative partners or our present or potential competitors;

our issuance of additional debt, equity or other securities, which we need to pursue in 2009 to generate additional funds to cover our current debt and operating expenses;

our quarterly operating results;

developments or disputes concerning patent or other proprietary rights;

developments in our relationships with collaborative partners;

acquisitions or divestitures;

litigation and government proceedings;

adverse legislation, including changes in governmental regulation;

third-party reimbursement policies;

changes in securities analysts recommendations;

short shelling;

changes in health care policies and practices;

halting or suspension of trading in our common stock by NASDAQ, CONSOB or the Borsa Italiana;

economic and other external factors; and

general market conditions.

In the past, following periods of volatility in the market price of a company s securities, securities class action litigation has often been instituted. For example, in the case of our Company, beginning in March 2005, several class action lawsuits were instituted against us and certain of our directors and officers and a derivative action lawsuit was filed against our full board of directors. While these lawsuits were dismissed with prejudice, as a result of these types of lawsuits, we could incur substantial legal fees and our management s attention and resources could be diverted from operating our business as we respond to the litigation. We maintain significant insurance to cover these risks for the Company and our directors and officers, but our insurance is subject to high deductibles to reduce premium expense, and there is no guarantee that the insurance will cover any specific claim that we may face in the future, or that it will be adequate to cover all potential liabilities and damages.

Anti-takeover provisions in our charter documents and under Washington law could make removal of incumbent management or an acquisition of us, which may be beneficial to our shareholders, more difficult.

Provisions of our articles of incorporation and bylaws may have the effect of deterring or delaying attempts by our shareholders to remove or replace management, to commence proxy contests, or to effect changes in control. These provisions include:

a classified board so that only approximately one third of the board of directors is elected each year;

elimination of cumulative voting in the election of directors;

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procedures for advance notification of shareholder nominations and proposals;

the ability of our board of directors to amend our bylaws without shareholder approval; and

the ability of our board of directors to issue shares of preferred stock without shareholder approval upon the terms and conditions and with the rights, privileges and preferences as the board of directors may determine.

In addition, as a Washington corporation, we are subject to Washington law which imposes restrictions on some transactions between a corporation and certain significant shareholders. These provisions, alone or together, could have the effect of deterring or delaying changes in incumbent management, proxy contests or changes in control.

USE OF PROCEEDS

All securities of our common stock offered by this prospectus are being registered for the account of the selling securityholders. We will not receive any of the proceeds from the sale of these securities. However, if a holder exercises a warrant in order to obtain underlying shares of common stock to sell, we would receive cash (if the exercise price is paid in cash.) The exercise price of these warrants range from $20.20 to $64.80 per share.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock and do not currently anticipate declaring or paying cash dividends on our common stock in the foreseeable future. Except for dividends payable on the Series A 3% Convertible Preferred Stock and the Series D 7% Convertible Preferred Stock, we currently intend to retain all of our future earnings, if any, to finance operations. Any future determination relating to our dividend policy will be made at the discretion of our board of directors and will depend on a number of factors, including future earnings, capital requirements, financial conditions, future prospects, contractual restrictions and other factors that our board of directors may deem relevant.

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PRICE RANGE OF COMMON STOCK

Our common stock is traded on The NASDAQ Capital Market under the symbol CTIC. The following table sets forth, for the periods indicated, the high and low sales prices per share of our common stock as reported by NASDAQ.

	High	Low
Year ending December 31, 2009:		
First Quarter (through February 13, 2009)	$ 0.16	$ 0.05
Year ending December 31, 2008:		
Fourth Quarter	$ 0.89	$ 0.12
Third Quarter	$ 4.90	$ 0.58
Second Quarter	$ 9.60	$ 4.60
First Quarter	$ 19.90	$ 4.70
Year ended December 31, 2007:		
Fourth Quarter	$ 38.90	$ 15.90
Third Quarter	$ 49.70	$ 30.00
Second Quarter	$ 75.60	$ 28.50
First Quarter	$ 72.40	$ 56.40

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for each of the periods indicated.

	Year Ended December 31,					Nine Months Ended September 30,	
	2003	2004	2005	2006	2007	2007	2008
	(dollars in thousands)						
Ratio of earnings to fixed charges(1)							

(1) Earnings were not sufficient to cover fixed charges, earnings consist of income (loss) before provision for income taxes plus fixed charges. Fixed charges consist of interest charges and that portion of rental payments under operating leases we believe to be representative of interest. Earnings for the years ended December 31, 2003, 2004, 2005, 2006 and 2007 and for the nine months ended September 30, 2007 and 2008, were insufficient to cover fixed charges by $130.3, $252.3, $102.5, $135.8, $148.3, $109.2 and $161.6 (in millions) respectively. For this reason, no ratios are provided for these periods.

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DESCRIPTION OF CAPITAL STOCK

This summary does not purport to be complete and is subject to, and qualified in its entirety by, the provisions of our amended and restated articles of incorporation, our bylaws, as amended, and all applicable provisions of Washington law.

General

We are authorized to issue 400,000,000 shares of common stock, no par value, and 10,000,000 shares of preferred stock, no par value. As of the close of business on February 12, 2009 there were 321,839,943 shares of our common stock outstanding and warrants to purchase 885,207 shares of our common stock were outstanding. As of the close of business on February 12, 2009, we also had 100 shares of our Series A 3% convertible preferred stock outstanding, 1,000 shares of our Series D 7% convertible preferred stock outstanding and 6,702 shares of our Series F preferred stock outstanding.

Common Stock

Each holder of common stock is entitled to one vote for each share held on all matters to be voted upon by the shareholders and there are no cumulative voting rights. Subject to preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably the dividends, if any, that are declared from time to time by the board of directors out of funds legally available for that purpose. In the event of a liquidation, dissolution or winding up of the Company, the holders of common stock are entitled to share in our assets remaining after the payment of liabilities and the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock (General)

The board of directors has the authority, without action by the shareholders, to designate and issue preferred stock in one or more series and to designate the rights, preferences and privileges of each series, which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the board of directors determines the specific rights of the holders of this preferred stock. However, the effects might include, among other things:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock;
- delaying or preventing a change in control of the Company without further action by the shareholders.

Anti-Takeover Effects of Provisions of Washington Law and our Charter and Bylaws

Washington law contains certain provisions that may have the effect of delaying, deterring or preventing a change in control of the Company. Chapter 23B.19 of the Washington Business Corporation Act prohibits us, with certain exceptions, from engaging in certain significant business transactions with an acquiring person (defined as a person or group of persons who acquire 10% or more of our voting securities without the prior approval of the our board of directors) for a period of five years following the acquiring person s share acquisition date. The prohibited transactions include, among others, a merger or consolidation with, disposition of assets to, or issuance or

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redemption of stock to or from, the acquiring person, or otherwise allowing the acquiring person to receive a disproportionate benefit as a shareholder. Exceptions to this statutory prohibition include approval of the transaction at a shareholders meeting by holders of not less than a two-thirds of the shares held by each voting group entitled to vote on the transaction, not counting shares as to which the acquiring person has beneficial ownership or voting control, transactions approved by the Board of Directors prior to the acquiring person first becoming an acquiring person, or, with respect to a merger, share exchange, consolidation, liquidation or distribution entered into with the acquiring person, transactions where certain other requirements regarding the fairness of the consideration to be received by the shareholders have been met. We may not exempt ourself from coverage of this statute. These statutory provisions may have the effect of delaying, deterring or preventing a change in control of the Company.

Our board of directors is divided into three approximately equal classes of directors serving staggered three-year terms. In addition, our amended and restated articles of incorporation provide that directors may be removed from office only at a meeting of the shareholders called expressly for that purpose and only for cause. Our amended and restated articles of incorporation limit cause to willful misfeasance having a material adverse effect on us or conviction of a felony, provided that any action by a director shall not constitute cause if, in good faith, the director believed the action to be in or not opposed to our best interests or if the director is entitled to be indemnified with respect to such action under applicable law, our amended and restated articles of incorporation or amended and restated bylaws, or a contract with us. Further, our amended and restated bylaws require a shareholder to provide notice to us of such shareholder s intention to nominate a person or persons for election as directors not later than 90 days prior to the first anniversary of the previous year s annual meeting or, in the case of an election to be held at a special meeting of the shareholders for the election of directors, the close of business on the tenth day following the date on which notice of such meeting is first given to shareholders. A shareholder must also provide us with notice of such shareholder s intent to make any proposal at an annual meeting of shareholders not later than 90 days prior to the first anniversary of the previous year s annual meeting of shareholders. These may have the effect of deterring hostile takeovers or delaying change in control of our management.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Investor Services, LLC.

DESCRIPTION OF WARRANTS ISSUED IN CONNECTION WITH THE ISSUANCE OF THE SERIES A 3% CONVERTIBLE PREFERRED STOCK

The material terms and provisions of the warrants being offered pursuant to this prospectus are summarized below. This summary is subject to, and qualified in its entirety by, the form of warrant filed as an exhibit to our current report on Form 8-K, which we filed with the SEC on February 12, 2007.

The warrants became exercisable on April 16, 2007 and will expire on April 16, 2009. The warrants are exercisable, at the option of each holder, upon the surrender of the warrants to us and the payment in cash of the exercise price of the shares being acquired upon exercise of the warrants.

The exercise price per share of common stock purchasable upon exercise of the warrants is $64.40 per share of common stock being purchased. The exercise price is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock. The holders of the warrants are entitled to 20 days notice before the record date for certain distributions to holders of our common stock. If certain fundamental transactions occur, such as a merger, consolidation sale of substantially all of our assets, tender offer or exchange offer with respect to our common stock or reclassification of our common stock, the holders of the warrants will be entitled to receive thereafter in lieu of our common stock, the consideration (if different from common stock), that the holders of our common stock received due to such fundamental transaction. As of February 12, 2009, there were 17 holders of warrants outstanding to purchase 149,476 shares of common stock.

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DESCRIPTION OF WARRANTS ISSUED IN CONNECTION WITH THE ISSUANCE OF THE SERIES B

3% CONVERTIBLE PREFERRED STOCK

The material terms and provisions of the warrants being offered pursuant to this prospectus are summarized below. This summary is subject to, and qualified in its entirety by, the form of warrant filed as an exhibit to our current report on Form 8-K, which we filed with the SEC on April 16, 2007.

The warrants became exercisable on October 16, 2007 and will terminate on the second anniversary of that date. The warrants will be exercisable, at the option of each holder, upon the surrender of the warrants to us and the payment in cash of the exercise price of the shares being acquired upon exercise of the warrants.

The exercise price per share of common stock purchasable upon exercise of the warrants is $64.80 per share of common stock being purchased. The exercise price is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock. The holders of the warrants are entitled to 20 days notice before the record date for certain distributions to holders of our common stock. If certain fundamental transactions occur, such as a merger, consolidation, sale of substantially all of our assets, tender offer or exchange offer with respect to our common stock or reclassification of our common stock, the holders of the warrants will be entitled to receive thereafter in lieu of our common stock, the consideration (if different from common stock), that the holders of our common stock received due to such fundamental transaction. As of February 12, 2009, there were 34 holders of warrants outstanding to purchase 276,373 shares of common stock.

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SELLING SECURITYHOLDERS

The following table sets forth the name of the selling securityholders which have provided us with information for this table, the number of securities beneficially owned by the selling securityholders as of February 13, 2009, and the total number of securities that may be offered pursuant to this prospectus. The table also provides information regarding the beneficial ownership of our securities by the selling securityholders as adjusted to reflect the assumed sale of all of the securities offered under this prospectus. Percentage of beneficial ownership is based on 321,839,943 shares of our common stock outstanding as of February 12, 2009. The selling securityholders may offer the securities for sale from time to time in whole or in part. Except where otherwise noted, the selling securityholders named in the following table have, to our knowledge, sole voting and investment power with respect to the securities which they beneficially own.

	Securities Beneficially Owned Prior to Offering					Beneficial Ownership After the Offering	
Beneficial Owner (1)	(A) Shares Underlying Warrants and Series D Convertible Preferred Stock	(B) Other Shares Beneficially Owned (2)	(C) (A+B) Total Shares Beneficially Owned	Percent (3)	(D) Number of Shares Being Registered	(C-D) Total Shares Owned (4)	Percent (3)
CD Investment Partners, Ltd (5)	57,415		57,415	*	57,415		*
Chestnut Ridge Partners, LP	25,000		25,000	*	25,000		*
Cranshire Capital, L.P. (6)	55,055		55,055	*	55,055		*
Enable Growth Partners LP	21,794		21,794	*	21,794		*
Enable Opportunity Partners LP	2,564		2,564	*	2,564		*
Evolution Master Fund Ltd SPC- Segregated Portfolio M	2		2	*	2		*
Firebird Global Master Fund II, Ltd	12,820	178,723	191,543	*	12,820	178,723	*
Firebird Global Master Fund, Ltd	22,389	228,084	250,473	*	22,389	228,084	*
GPC LIX, LLC	1,485	6,198	7,683	*	1,485	6,198	*
GPC LX, LLC (7)	3,737	35,229	38,966	*	3,737	35,229	*
Harvest Capital Enhanced LTD	10,906		10,906	*	10,906		*
Harvest Capital LP	3,075		3,075	*	3,075		*
Harvest Institutional Partners LP	6,047		6,047	*	6,047		*
Hudson Bay Fund LP (8)	14,372		14,372	*	14,372		*
Hudson Bay Overseas Fund LTD (9)	17,630		17,630	*	17,630		*
Iroquois Master Fund Ltd. (10)	51,413		51,413	*	51,413		*
Midsummer Investment, Ltd.	51,282		51,282	*	51,282		*
Pandora Select Partners, LP	3,714	15,532	19,246	*	3,714	15,532	*
Pierce Diversified Strategy Master Fund LLC, Ena	1,282		1,282	*	1,282		*
Rockmore Investment Master Fund Ltd (11)	10,147	5,034,396	5,044,543	1.5%	10,147	5,034,396	1.5%
SCO Capital Partners, LLC	12,820	7,142,857	7,155,677	2.2%	12,820	7,142,857	2.2%
Truk International Fund (12)	16,645		16,645	*	16,645		*
Truk Opportunity Fund (13)	45,678		45,678	*	45,678		*
Whitebox Combined Partners, LP	14,197	62,767	76,964	*	14,197	62,767	*
Whitebox Convertible Arbitrage Partners LP	8,425	43,984	52,409	*	8,425	43,984	*
Whitebox Hedged High Yield Partners, LP	5,891	11,005	16,896	*	5,891	11,005	*
Wolverine Convertible Arbitrage Fund Trading LTD	41,106	389,878	393,981	*	41,106	389,878	*
All Other Selling Securityholders	397,843	TBD	TBD	TBD	397,843	TBD	TBD

* Less than one percent of the outstanding shares of common stock.

(1)

Additional selling securityholders not named in this prospectus will not be able to use this prospectus for resales until they are named in the selling securityholder table by prospectus supplement or post-effective amendment.

(2) Includes shares of common stock issuable upon conversion of the 5.75% Convertible Senior Notes due 2011, 7.5% Convertible Senior Notes due 2011, 9.0% Convertible Senior Notes due 2012, Series D 7% convertible preferred stock and Series F preferred stock. The Series F preferred stock becomes convertible on the later of April 1, 2009 or the day the Company s authorized number of shares of Common Stock is increased.

(3) Calculated based on Rule 13d-3(d)(1)(i) of the Exchange Act using 321,839,943 shares of common stock outstanding as of February 12, 2009. In calculating each respective holder s percentage, we did not assume the issuance of any other shares issuable upon exercise of outstanding warrants or options or conversion of any outstanding convertible notes except for those underlying the holder s own derivative securities.

(4) Assumes that all of the shares of common stock registered for resale hereunder have been sold by the selling securityholders.

(5) Carpe Diem Capital Management LLC (Carpe Diem Capital), as investment manager for CD Investment Partners, Ltd. (CDIP), ZPII, LP (ZPII), as the manager and sole member of Carpe Diem Capital, C3 Management Inc. (C3), as the general partner of ZPII, and John D. Ziegelman, as the Chairman of the Board, President and Treasurer and the beneficial owner of 100% of the outstanding shares of common stock of C3, each may be deemed to have beneficial ownership of the shares owned by CDIP which are being registered hereunder.

(6) Downsview Capital, Inc. (Downsview) is the general partner of Cranshire Capital, L.P. (Cranshire) and consequently has voting control and investment discretion over securities held by Cranshire. Mitchell P. Kopin (Mr. Kopin), President of Downsview, has voting control over Downsview. As a result of the foregoing, each of Mr. Kopin and Downsview may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the shares of common stock beneficially owned by Cranshire.

(7) GPC LX, LLC is a Delaware limited liability company. The limited liability company manager of GPC LX, LLC is Guggenheim Advisors, LLC (GA). The investment manager of GPC LX, LLC is Wolverine Asset

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Management, LLC (WAM). Christopher Gust is the portfolio manager that oversees the investment of the assets of GPC, LX, LLC on behalf of WAM. Each of GA, WAM and Mr. Gust disclaim beneficial ownership of the securities.

(8) Sander Gerber, Yoav Roth and Charles Winkler share voting and investment power over these securities. Each of Sander Gerber, Yoav Roth and Charles Winkler disclaim beneficial ownership over the securities held by Hudson Bay Fund LP. The selling stockholder acquired these securities offered for its own account in the ordinary course of business, and at the time it acquired the securities, it had no agreements, plans or understandings, directly or indirectly to distribute the securities.

(9) Sander Gerber, Yoav Roth and Charles Winkler share voting and investment power over these securities. Each of Sander Gerber, Yoav Roth and Charles Winkler disclaim beneficial ownership over the securities held by Hudson Bay Overseas Fund LTD. The selling stockholder acquired these securities offered for its own account in the ordinary course of business, and at the time it acquired the securities, it had no agreements, plans or understandings, directly or indirectly to distribute the securities.

(10) Joshua Silverman has voting and investing control over the shares held by Iroquois Master Fund Ltd. Mr. Silverman disclaims beneficial ownership of these shares.

(11) Rockmore Capital, LLC (Rockmore Capital) and Rockmore Partners, LLC (Rockmore Partners), each a limited liability company formed under the laws of the State of Delaware, serve as the investment manager and general partner, respectively, to Rockmore Investments (US) LP, a Delaware limited partnership, which invests all of its assets through Rockmore Investment Master Fund Ltd., an exempted company formed under the laws of Bermuda (Rockmore Master Fund). By reason of such dispositive power over the shares of our common stock owned by Rockmore Master Fund. Rockmore Capital and Rockmore Partners disclaim beneficial ownership of such shares of our common stock. Rockmore Partners has delegated authority to Rockmore Capital regarding the portfolio management decisions with respect to the shares of common stock owned by Rockmore Master fund and, as of February 10, 2009, Mr. Bruce T. Bernstein and Mr. Brian Daly, as officers of Rockmore Capital, are responsible for the portfolio management decisions of the shares of common stock owned by Rockmore Master Fund. By reason of such authority, Messrs. Bernstein and Daly may be deemed to share dispositive power over the shares of our common stock owned by Rockmore Master Fund. Messrs. Bernstein and Daly disclaim beneficial ownership of such shares of our common stock and neither of such persons has any legal right to maintain such authority. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock as those terms are used for purposed under Regulation 13D-G of the Exchange Act. No person or group (as that term is used in Section 13(d) of the Exchange Act, or the SEC s Regulation 13D-G) controls Rockmore Master Fund.

(12) Michael E. Fein and Stephen E. Saltzstein, as principals of Atoll Asset Management, LLC, the Managing Member of Truk International Fund, LP, exercise investment and voting control over the shares of our common stock owned by Truk International Fund, LP. Both Mr. Fein and Mr. Saltzstein disclaim beneficial ownership of shares of our common stock owned by Truk International Fund, LP.

(13) Michael E. Fein and Stephen E. Saltzstein, as principals of Atoll Asset Management, LLC, the Managing Member of Truk Opportunity Fund, LLC, exercise investment and voting control over the shares of our common stock owned by Truk Opportunity Fund, LLC. Both Mr. Fein and Mr. Saltzstein disclaim beneficial ownership of shares of our common stock owned by Truk Opportunity Fund, LLC.

The identified selling securityholders provided us with information with respect to their securities ownership. Because the selling securityholders may sell all, part or none of their respective shares or other securities, we are unable to estimate the number of shares or other securities that will be held by the selling securityholders upon resale of the securities being offered by this prospectus. We have, therefore, assumed for the purposes of the registration statement related to this prospectus that the selling securityholders will sell all of their securities. See Plan of Distribution.

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The identified selling securityholders have informed us that as of February 12, 2009 they do not have a short position in our common stock.

PLAN OF DISTRIBUTION

The selling securityholders and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of the securities on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling securityholders may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- broker-dealers may agree with the selling securityholder to sell a specified number of such securities at a stipulated price per security;
- a combination of any such methods of sale;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise; or
- any other method permitted pursuant to applicable law.

The selling securityholders may also sell securities under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling securityholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling securityholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated. The selling securityholders do not expect these commissions and discounts relating to its sales of securities to exceed what is customary in the types of transactions involved.

In connection with the sale of our common stock or interests therein or other securities, the selling securityholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling securityholders may also sell shares of our common stock or other securities short and deliver these securities to close out its short positions, or loan or pledge the common stock or other securities to broker-dealers that in turn may sell these securities. The selling securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares or other

securities offered by this prospectus, which shares or other securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling securityholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be underwriters within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by

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such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling securityholders have informed us that they do not have any agreement or understanding, directly or indirectly, with any person to distribute the securities.

Because the selling securityholders may be deemed to be underwriters within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The selling securityholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale securities. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the selling securityholders.

The securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of the distribution. In addition, the selling securityholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling securityholders or any other person. We will make copies of this prospectus available to the selling securityholders and have informed the selling securityholders of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

We will not receive any proceeds from the sale of the securities by the selling securityholders. However, if a holder exercises a warrant in order to obtain underlying shares of common stock to sell, we would receive cash (if the exercise price is paid in cash.)

LEGAL MATTERS

Certain legal matters in connection with the offering will be passed upon for us by Orrick, Herrington & Sutcliffe LLP, San Francisco, California.

EXPERTS

Stonefield Josephson, Inc., an independent registered public accounting firm, has audited our consolidated financial statements and consolidated financial statement schedule at December 31, 2007, and for each of the three years in the period ended December 31, 2007, included in our Annual Report on Form 10-K for the year ended December 31, 2007, as set forth in its report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Such consolidated financial statements and consolidated financial statement schedule are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Exchange Act. In accordance with the Exchange Act, we file reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information filed by us are available free of charge on our web site, http://www.celltherapeutics.com, and may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference facilities by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

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Our common stock is listed on The NASDAQ Capital Market and such reports, proxy statements and other information concerning us may be inspected at the offices of The NASDAQ Stock Market, 1735 K Street, N.W., Washington, D.C. 20006.

DOCUMENTS INCORPORATED BY REFERENCE

SEC rules allow us to incorporate by reference into this prospectus the information we file with the SEC. This means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus. We incorporate by reference the documents listed below:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, as amended;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2008, June 30, 2008 and September 30, 2008;
- our definitive Proxy Statement on Schedule 14A, dated and filed with the SEC on May 23, 2008 for our 2008 Special Meeting in lieu of Annual Meeting of Shareholders;
- our definitive Proxy Statement on Schedule 14A, dated and filed with the SEC on January 14, 2009 for a Special Meeting of Shareholders;
- our Current Reports on Form 8-K, and Amended Current Reports filed on Form 8-K/A, filed on January 3, 2008, January 14, 2008, January 18, 2008, January 29, 2008, February 5, 2008, February 19, 2008, March 5, 2008, March 11, 2008, March 21, 2008, April 4, 2008, April 18, 2008, April 30, 2008, May 2, 2008, June 13, 2008, June 20, 2008, June 24, 2008, July 25, 2008, July 30, 2008, August 6, 2008 and August 20, 2008, May 2, 2008, June 13, 2008, June 20, 2008, June 24, 2008, July 25, 2008, July 30, 2008, August 6, 2008, August 20, 2008, September 4, 2008, September 5, 2008, September 17, 2008, October 1, 2008, October 10, 2008, October 24, 2008, November 28, 2008, December 8, 2008, December 19, 2008, January 6, 2009, January 8, 2009, January 29, 2009 and February 9, 2009; and
- The description of our capital stock contained in our Registration Statements on Form 10 filed with the SEC on June 27, 1996 and June 28, 1996, including any amendment or reports filed for the purpose of updating that description.

In addition, we also incorporate by reference into this prospectus additional information that we may subsequently file with the Securities and Exchange Commission under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the termination of the offering. These documents include Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

Notwithstanding the foregoing, unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K that we may from time to time furnish to the Securities and Exchange Commission will be incorporated by reference into, or otherwise included in, this prospectus.

We are subject to the information and reporting requirements of the Exchange Act, and file periodic reports, proxy statements and we make available to our stockholders annual reports containing audited financial information for each year and quarterly reports for the first three quarters of each fiscal year containing unaudited interim financial information.

We will provide without charge to each person, including any beneficial owner of our indicated securities, to whom this prospectus is delivered, upon written or oral request, a copy of any and all of the documents that have been incorporated by reference in the prospectus but not delivered with this prospectus (without exhibits, unless the exhibits are specifically incorporated by reference but not delivered with this prospectus). Requests should be directed to:

Louis A. Bianco

Executive Vice President, Finance and Administration

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

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You should rely only on the information contained in this prospectus. We have not authorized any person to provide you with information different from that contained in this prospectus. This prospectus may be used only where it is legal to sell the indicated securities of Cell Therapeutics, Inc. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the date of delivery of this prospectus or of any sale of the indicated securities of Cell Therapeutics, Inc.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an estimate of the fees and expenses payable by the Registrant in connection with the registration of the securities offered hereby. All of such fees expenses, except for the Registration Fee, are estimated:

Securities and Exchange Commission registration fee	$ 1,710
Accounting fees and expenses	20,000
Legal fees and expenses	35,000
Miscellaneous	25,000
Total	$ 81,710

All expenses in connection with the issuance and distribution of the securities being offered shall be borne by the registrant, other than underwriting discounts and selling commissions, if any.

Item 15. Indemnification of Directors and Officers

Sections 23B.08.500 through 23B.08.600 of the Washington Business Corporation Act (the WBCA) authorize a court to award, or a corporation s board of directors to grant, indemnification to directors and officers on terms sufficiently broad to permit indemnification under certain circumstances for liabilities arising under the Securities Act of 1933. Article IX of the Registrant s Restated Bylaws provides for indemnification of the Registrant s directors, officers, employees and agents to the maximum extent permitted by Washington law. The directors and officers of the Registrant also may be indemnified against liability they may incur for serving in such capacity pursuant to a liability insurance policy we maintain for such purpose.

Section 23B.08.320 of the WBCA authorizes a corporation to limit a director s liability to the corporation or its shareholders for monetary damages for acts or omissions as a director, except in certain circumstances involving intentional misconduct, knowing violations of law or illegal corporate losses or distributions, or any transaction from which the director personally receives a benefit in money, property or services to which the director is not legally entitled. Article VI of the Registrant s Restated Articles of Incorporation contains provisions implementing, to the fullest extent permitted by Washington law, such limitations on a director s liability to the Registrant and its shareholders.

The Registrant has entered into an indemnification agreement with each of its executive officers and directors in which the Registrant agrees to hold harmless and indemnify the officer or director to the fullest extent permitted by Washington law. The Registrant agrees to hold harmless and indemnify the officer or director against any and all losses, claims, damages, liabilities or expenses incurred in connection with any actual, pending or threatened action, suit, claim or proceeding, whether civil, criminal, administrative or investigative and whether formal or informal, in which the officer or director is, was or becomes involved by reason of the fact that the officer or director is or was a director, officer, employee, trustee or agent of the Registrant or any related company, partnership or enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action (or inaction) by the officer or director in an official capacity and any action, suit, claim or proceeding instructed by or at the direction of the officer or director unless such action, suit, claim or proceeding is or was authorized by the Registrant s Board of Directors. No indemnity pursuant to the indemnification agreements shall be provided by the Registrant on account of any suit in which a final, unappealable judgment is rendered against the officer or director for an accounting of profits made from the purchase or sale by the officer or director of securities of the Registrant in violation of the provisions of Section 16(b) of the Securities Exchange Act of 1934, and amendments thereto, or for damages that have been paid directly to the officer or director by an insurance carrier under a policy of directors and officers liability insurance maintained by the Registrant.

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Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

Exhibit Number	Description
4.1 (1)	Registrant s Amended and Restated Articles of Incorporation, as amended
4.2 (2)	Registrant s Amended and Restated Bylaws
4.3 (3)	Form of Warrant issued February 12, 2007 and February 14, 2007.
4.4 (4)	Form of Warrant issued April 16, 2007.
4.5 (5)	Form of Registration Rights Agreement between Cell Therapeutics and Certain Holders dated December 12, 2007.
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4.10 (9)	Securities Purchase Agreement between Cell Therapeutics, Inc. and Purchasers dated November 29, 2007.
4.11 (10)	Securities Purchase Agreement between Cell Therapeutics, Inc. and Purchasers dated December 20, 2007.
5.1	Opinion of Orrick, Herrington & Sutcliffe LLP.
12.1	Statement Re: Computation of Ratio of Earnings to Fixed Charges (included on page 26 of the Prospectus included herein).
23.1	Consent of Stonefield Josephson, Inc., Independent Registered Public Accounting Firm.
23.2	Consent of Orrick, Herrington & Sutcliffe LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on signature page of the Registration Statement hereto).

(1) Incorporated by reference to exhibits to the Registrant s Registration Statement on Form S-3 (No. 333-153358)
(2) Incorporated by reference to exhibits to the Registrant s Current Report on Form 8-K, filed on July 25, 2008.
(3) Incorporated by reference to exhibits to the Registrant s Current Report on Form 8-K, filed on February 12, 2007.
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(9) Incorporated by reference to exhibits to the Registrant s Current Report on Form 8-K, filed on December 27, 2007.

Item 17. Undertakings

(a) 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;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the 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 the 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 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 a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

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

2. That, for the purpose of determining any liability under the Securities Act of 1933, each such 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 that 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.

4. That, for the purposes of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering

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made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant s annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, 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 of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Seattle, state of Washington, on this 17th day of February, 2009.

CELL THERAPEUTICS, INC.

By: /s/ James A. Bianco

James A. Bianco, M.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that the undersigned officers and directors of Cell Therapeutics, Inc., a Washington corporation, do hereby constitute and appoint James A. Bianco and Louis A. Bianco and each of them individually, the lawful attorneys-in-fact and agents, each with full power of substitution or re-substitution, with full power and authority to do any and all acts and things and to execute any and all instruments which said attorneys-in-fact and agents, or either one of them, determine may be necessary or advisable or required to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules or regulation or requirements of the Securities and Exchange Commission in connection with this Registration Statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this Registration Statement, to any and all amendments, both pre-effective and post-effective, and supplements to this Registration Statement and to any and all instruments or documents filed as part of or in conjunction with this Registration Statement or amendments or supplements thereto, and each of the undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents, or either one of them, shall do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Phillip M. Nudelman **Phillip M. Nudelman, Ph.D.**	Chairman of the Board	February 14, 2009
/s/ James A. Bianco, M.D. **James A. Bianco, M.D.**	Chief Executive Officer and Director (Principal Executive Officer)	February 17, 2009
/s/ Louis A. Bianco, M.D. **Louis A. Bianco**	Executive Vice President, Finance and Administration (Principal Financial Officer and Principal Accounting Officer)	February 17, 2009
/s/ John H. Bauer **John H. Bauer**	Director	February 14, 2009

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Signature	Title	Date
/s/ Vartan Gregorian, Ph.D. **Vartan Gregorian, Ph.D.**	Director	February 14, 2009
/s/ Richard L. Love **Richard L. Love**	Director	February 14, 2009
/s/ Mary O. Mundinger, Dr **Mary O. Mundinger, Dr. PH**	Director	February 16, 2009
/s/ Jack W. Singer, M.D. **Jack W. Singer, M.D.**	Director	February 15, 2009
/s/ Frederick W. Telling, Ph. D. **Frederick W. Telling, Ph.D.**	Director	February 15, 2009

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