CELL THERAPEUTICS INC Form 424B5 October 20, 2010 Table of Contents

Filed Pursuant to Rule 424(b)(5)

Registration Statement No.: 333-161442

CALCULATION OF REGISTRATION FEE

Title of each class	Maximum aggregate	Amount of
of securities to be registered Series 7 Preferred Stock, no par value per share, and underlying shares of common stock, no par value	offering price	registration fee ⁽¹⁾⁽²⁾
per share	\$21,000,000	\$1,498
Warrants to purchase shares of common stock, no par value per share Total	\$10,216,216 \$31,216,216	\$ 729 ⁽³⁾ \$2,227

(1) Calculated in accordance with Rule 457(r) under the Securities Act.

(2) This Calculation of Registration Fee table shall be deemed to update the Calculation of Registration Fee table in the registrant s registration statement on Form S-3 (File No. 333-161442) in accordance with Rules 456(b) and 457(r) under the Securities Act.

(3) Pursuant to Rule 457(g) under the Securities Act, the filing fee is calculated based on the price at which the warrants may be exercised.

PROSPECTUS SUPPLEMENT

(to Prospectus dated August 19, 2009)

CELL THERAPEUTICS, INC.

21,000 Shares of Series 7 Preferred Stock

Warrants to Purchase 22,702,704 Shares of Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering 21,000 shares of Series 7 Convertible Preferred Stock, or the Series 7 Preferred Stock, and warrants to purchase up to 22,702,704 shares of common stock, or the warrants (and the 79,459,461 shares of common stock issuable from time to time upon conversion of the Series 7 Preferred Stock and exercise of the warrants) to certain institutional investors, or collectively, the Initial Purchasers. The purchase price for each share of Series 7 Preferred Stock and a warrant to purchase 1,081 shares of common stock is \$1,000. Each warrant to purchase shares of our common stock will have an exercise price of \$0.45 per share. The warrants are exercisable six months and one day after the date of issuance and expire five years from the date of issuance.

For a more detailed description of the Series 7 Preferred Stock and warrants, see the sections entitled Description of Series 7 Preferred Stock and Description of Warrants beginning on pages S-15 and S-17, respectively, of this prospectus supplement. For a more detailed description of our common stock issuable upon the conversion of the Series 7 Preferred Stock and exercise of the warrants, see the section entitled Description of Capital Stock beginning on page S-18 of this prospectus supplement.

Rodman & Renshaw, LLC acted as the sole placement agent and book runner on this transaction. The placement agent is not purchasing or selling any of these securities nor is it required to sell any specific number or dollar amount of securities, but has agreed to use its reasonable best efforts to sell the securities offered by this prospectus supplement.

This prospectus supplement and the accompanying prospectus also cover the sale of these securities by the Initial Purchasers to the public.

The Series 7 Preferred Stock and warrants will not be listed on any national securities exchange. Our common stock is quoted on The NASDAQ Capital Market and on the *Mercato Telematico Azionario* stock market in Italy, or the MTA, under the symbol CTIC. On October 19, 2010, the last reported sale price of our common stock on The NASDAQ Capital Market was \$0.44.

Investing in the Series 7 Preferred Stock, common stock and warrants involves a high degree of risk. See the section entitled <u>Risk Factors</u> beginning on page S-5 of this prospectus supplement and in the documents we incorporate by reference in this prospectus supplement to read about factors you should consider before investing in our securities.

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

	Shares of Series 7	Per share of Series 7		
	Preferred Stock	Prefer	red Stock	
	and warrant	and wa	arrant (1)	Total
Offering price per share of Series 7 Preferred Stock and warrant	21,000	\$	1,000	\$ 21,000,000
Placement agent fees (2)		\$	50	\$ 1,050,000
Total proceeds to us before other expenses		\$	950	\$ 19,950,000

(1) Table excludes shares of common stock issuable upon exercise of the warrants offered hereby.

(2) A fee equal to 5% of the aggregate proceeds raised in this offering will be payable to the placement agent.

In addition to the placement agent fees, the placement agent will receive warrants to purchase up to 1,135,135 registered shares of common stock pursuant to this prospectus supplement.

The Series 7 Preferred Stock and warrants will be delivered to the Initial Purchasers on or about October 22, 2010.

This prospectus supplement is dated October 19, 2010.

TABLE OF CONTENTS

Prospectus Supplement

	Page
About This Prospectus Supplement	S-ii
Where You Can Find More Information	S-ii
Incorporation of Certain Documents by Reference	S-iii
Special Note Regarding Forward-Looking Statements	S-iii
Summary	S-1
The Offering	S-3
Risk Factors	S-5
Use of Proceeds	S-13
Determination of Offering Price	S-14
Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends	S-14
Dividend Policy	S-14
Description of Series 7 Preferred Stock	S-15
Description of Warrants	S-17
Description of Capital Stock	S-18
Plan of Distribution	S-20
Certain U.S. Federal Income Tax Considerations	S-21
Legal Matters	S-21

Prospectus

About This Prospectus	1
Where You Can Find More Information	1
Incorporation of Certain Documents by Reference	2
Special Note Regarding Forward-Looking Statements	2
Ratio of Earnings to Fixed Charges and Preferred Stock Dividends	4
<u>Use of Proceeds</u>	4
Dividend Policy	4
Legal Matters	4
Experts	4

You should rely only on the information contained or incorporated by reference in this prospectus supplement or the accompanying prospectus. We have not authorized anyone to provide you with different information.

We are not making an offer of the Series 7 Preferred Stock and warrants (or the shares of common stock issuable from time to time upon conversion of the Series 7 Preferred Stock and exercise of the warrants) covered by this prospectus supplement in any jurisdiction where the offer is not permitted.

You should not assume that the information contained in or incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the respective dates thereof.

Page

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of Series 7 Preferred Stock and warrants (and the shares of common stock issuable from time to time upon conversion of the Series 7 Preferred Stock and exercise of the warrants), and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference. The second part is the accompanying prospectus, which gives more general information. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference, on the other hand, you should rely on the information in this prospectus supplement.

In this prospectus supplement, the terms CTI, Company, we, us, our and similar terms refer to Cell Therapeutics, Inc., a Washington corpora and its subsidiaries, unless the context otherwise requires.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus supplement is not an offer to sell these securities, and it is not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of its respective date, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus, or of any sale of the Series 7 Preferred Stock and warrants (or the common stock issuable upon conversion of the Series 7 Preferred Stock and exercise of the warrants). You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference before making an investment decision. You should also read and consider the information in the documents we have referred you to in the section of this prospectus supplement entitled Incorporation of Certain Documents by Reference.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In accordance with the Exchange Act, we file reports, proxy statements and other information with the Securities and Exchange Commission, or the SEC. Such reports, proxy statements and other information filed by us are available to the public free of charge at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.celltherapeutics.com. You may also read and copy any document we file 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.

This prospectus supplement and the accompanying prospectus are part of a registration statement we filed with the SEC. This prospectus supplement and the accompanying prospectus omit some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and the securities being offered hereby. Statements in this prospectus supplement or the accompanying prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

S-ii

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

SEC rules allow us to incorporate by reference into this prospectus supplement and the accompanying prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference into this prospectus supplement and the accompanying prospectus is considered to be part of this prospectus supplement and the accompanying prospectus incorporate by reference by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2009;

our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2010 and June 30, 2010;

our Current Reports on Form 8-K filed on January 19, 2010 (Items 1.01, 3.03, 5.03 and 9.01 (excluding exhibit 99.1) only), February 9, 2010 (Item 8.01 only), February 22, 2010, March 2, 2010 (Item 8.01 only), March 5, 2010, March 22, 2010 (Item 8.01 only), April 5, 2010 (Items 1.01, 3.03, 5.03 and 9.01 (excluding exhibit 99.1) only), April 6, 2010, April 9, 2010 (Item 8.01 only), April 15, 2010 (Item 2.05 only), May 4, 2010 (Item 3.01 only), May 20, 2010 (Item 3.02 only), May 26, 2010, May 27, 2010 (Items 1.01, 3.02, 3.03, 5.03, 8.01 and 9.01 (excluding exhibit 99.1) only), June 29, 2010 (Item 8.01 only), July 14, 2010, July 26, 2010, July 27, 2010, August 24, 2010, September 17, 2010 (Items 5.02, 5.03, 5.07 and 9.01 (excluding exhibit 99.1) only), and October 6, 2010; and

the description of our capital stock contained in our Registration Statement on Form 10 filed on June 27, 1996, as amended. Because we are incorporating by reference future filings with the SEC, this prospectus supplement and the accompanying prospectus are continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus supplement and the accompanying prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement and the accompanying prospectus or in any document previously incorporated by reference have been modified or superseded.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

Attention: Investor Relations

Such filings are also available to the public free of charge at www.sec.gov.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange

Act. All statements other than statements of historical fact are forward-looking statements for purposes of these provisions, including:

any projections of cash resources, revenues, operating expenses or other financial terms;

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

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;

any statements regarding compliance with NASDAQ listing standards;

S-iii

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 terms such as anticipates, believes, continue, could, estimates, expects, n plans, potential, predicts, should or will or the negative thereof or other comparable terms. Such statements are based on management s cur expectations and are subject to risks and uncertainties which may cause actual results to differ materially from those set forth in the forward-looking statements. 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 described in the section of this prospectus supplement entitled Risk Factors. All forward-looking statements and reasons why results may differ included in this prospectus supplement 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, except to the extent required by law.

S-iv

SUMMARY

The following summary highlights information contained elsewhere, or incorporated by reference, in this prospectus supplement and the accompanying prospectus. The following summary does not contain all of the information that you should consider before investing in our securities. To understand this offering fully, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the financial statements and the documents incorporated by reference.

Our Company

We develop, acquire and commercialize novel 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. Our operations are primarily conducted in the United States. We are currently focusing our efforts on pixantrone, OPAXIO, brostallicin and novel bisplatinum analogues.

Corporate Information

We were incorporated in the State of Washington in 1991. Our shares of common stock trade on The NASDAQ Capital Market and the MTA in Italy under the symbol CTIC. Our principal executive offices are located at 501 Elliott Avenue West, Suite 400, Seattle, Washington 98119, and our phone number is (206) 282-7100. Our website is located at www.celltherapeutics.com; however, the information in, or that can be accessed through, our website is not part of this prospectus supplement or the accompanying prospectus.

Recent Developments

Pediatric Committee of the European Medicines Agency

October 19, 2010, we announced that the Pediatric Committee, or the PDCO, of the European Medicines Agency, or the EMA, has adopted an opinion agreeing to our Pixuvri[®] (pixantrone dimaleate) Pediatric Investigation Plan, or PIP, for the treatment of lymphoid malignancies and solid tumors in children between the ages of six months and 18 years. We submitted the updated PIP to the PDCO in July 2010 after it recommended that we expand the original PIP to include pixantrone s potential clinical benefit of reducing long-term cardiotoxicity associated with current curative therapies in children. The expanded PIP was accepted for review by the PDCO in August 2010. The recommendation from the PDCO came following discussions with us about the preclinical and clinical pixantrone data, including PIX301, and the desire to explore the potential benefits pixantrone may offer to children with hematologic cancers and solid tumors. The PDCO also recommended deferral of the initiation of the clinical studies until after the drug receives EMA approval. We expect the EMA s decision on adoption of the PDCO s recommendations later this quarter.

Notice from The NASDAQ Stock Market

On May 3, 2010, we received a notice from NASDAQ indicating that for 30 consecutive business days the closing bid price of our common stock was below the minimum \$1.00 per share requirement for continued listing of our common stock on The NASDAQ Capital Market under NASDAQ Marketplace Rule 5550(a)(2). This notification has no immediate effect on the listing of, or the ability to trade, our common stock on The NASDAQ Capital Market.

NASDAQ Marketplace Rule 5810(c)(3)(A) provides us with a grace period of 180 calendar days, or until November 1, 2010, to regain compliance. We will achieve compliance if the closing bid price of our common stock is \$1.00 per share or more for a minimum of ten consecutive trading days before November 1, 2010. Alternatively, we may be eligible for an additional 180-day grace period if we meet all of the initial listing standards of NASDAQ, with the exception of the closing bid price. We believe that we are currently in compliance with all of the initial listing standards other than the minimum shareholders equity standard and the closing bid price described above. We believe that the net proceeds from this offering will enable us to achieve the minimum shareholders equity requirement and, therefore, comply with all of the initial listing standards prior to November 1, 2010. However, NASDAQ is responsible for determining whether the net proceeds from this offering enable us to achieve the minimum shareholders equity requirement. If NASDAQ agrees with our determination, then we believe that we will be eligible for the additional 180-day grace period. There can be no assurance that our closing bid price will achieve \$1.00 per share or more for the applicable period or that we will successfully close this offering or achieve the minimum shareholders equity. In the event that we receive a delisting determination from NASDAQ, we may request a hearing before NASDAQ s Listing Qualifications Panel, or the Panel. Following the hearing request, our common stock would continue to be listed on The NASDAQ scapital Market pending the conclusion of the hearing process

Table of Contents

and during any extension period which may be granted by the Panel. There can be no assurance that the Panel would delay an unfavorable delisting decision or grant any extension period. See Risk Factors Risks Related to Our Company Our common stock is listed on The NASDAQ Capital Market and the MTA in 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.

Recent Financing Initiatives

We have held preliminary discussions with several investment funds regarding a potential investment in our company, but we have no current agreements or commitments with respect to any investment by these investment funds or any other investors (other than this offering). We have substantial operating expenses associated with the development of our product candidates and we continually evaluate our financing needs and alternatives. There can be no assurance that our discussions with these investment funds or any other investors will result in an investment in our company. See Risk Factors Risks Related to Our Company We need to raise additional funds and expect that we will need to continue to raise funds in the future, and additional funds may not be available on acceptable terms, or at all; failure to raise significant additional funds may cause us to cease development of our products and operations.

CONSOB Investigation

On May 5, 2010, the Commissione Nazionale per le Società e la Borsa, or CONSOB, (i) notified us that it has begun the preliminary investigation for its decision on administrative proceedings relating to three asserted violations of the provisions of Section 114, paragraph 5 of the Italian Legislative Decree no. 58/98 contained in a notice that CONSOB sent to us on July 31, 2009 and (ii) provided us with a preliminary investigation report in reply to our defenses that were submitted to CONSOB on August 28, 2009. On June 4, 2010 (within 30 days of May 5, 2010, the notification date of the beginning of the aforesaid preliminary investigation, according to the applicable Italian rules), we submitted further defenses that CONSOB will have to evaluate before imposing any possible administrative sanctions.

On July 12, 2010, CONSOB (i) notified us that it has begun the preliminary investigation for its decision on administrative proceedings relating to two claimed violations of the provisions of Section 114, paragraph 1 of the Italian Legislative Decree no. 58/98, due to the asserted late disclosure of certain information reported, at CONSOB s request, in a press release disseminated on December 19, 2008 and March 23, 2009, contained in a notice that CONSOB sent to us on December 10, 2009 and (ii) provided us with a preliminary investigation report in reply to our defenses which were submitted to CONSOB on January 8, 2010. On August 12, 2010 (within 30 days of July 12, 2010, the notification date of the beginning of the aforesaid preliminary investigation, according to the applicable Italian rules), we submitted further defenses that CONSOB will have to evaluate before imposing any possible administrative sanctions.

Shareholder Derivative Action

On June 1, 2010, a shareholder derivative action, Souda v. John H. Bauer et. al. (Case No 2:10-cv-00905), was filed in the United States District Court for the Western District of Washington. It has been consolidated with the three consolidated shareholder derivative actions filed against the members of our board of directors that are pending before Judge Marsha Pechman. On July 27, 2010, another shareholder derivative action, Bohland v. John H. Bauer et al. (Case No. 2:10-cv-1213), was filed in the United States District Court for the Western District of Washington. On October 4, 2010, a sixth shareholder derivative complaint, Alexander v. James A. Bianco, et al. (Case No. 10-2-34849-2-SEA), was filed in the Superior Court of Washington, County of King and was removed on October 5, 2010 to the United States District Court for the Western District of the Western District of Washington. The Bohland and Alexander complaints are pending consolidation with the other four derivative actions. Also pending are motions concerning lead plaintiff appointment.

Value Added Tax Assessment

On June 25, 2010, the Italian Tax Authority, or ITA, issued notices of assessment to Cell Therapeutics Inc. Sede Secondaria, or CTI (Europe), based on the ITA s audit of CTI (Europe) s value added tax, or VAT, returns for the years 2006 and 2007. The ITA audits concluded that CTI (Europe) did not collect and remit VAT on certain invoices issued to non-Italian clients for services performed by CTI (Europe). The assessments, including interest and penalties, for the years 2006 and 2007 are €2.5 million and €0.8 million as of June 30, 2010, respectively. On July 14, 2010, the ITA issued a notice of deposit payment to CTI (Europe) based on the 2005 assessment including interest and collection fees for an amount of €0.9 million, payable in the third quarter 2010. We successfully filed a petition with the Provincial Tax Court of Milan, or the Tax Court, for suspension of the 2005 notice of deposit payment. On September 28, 2010, the merits of the case for the 2005 assessment were discussed in a public hearing before the Tax Court, which has reserved its decision in order to carefully review the arguments, relevant documents and other supporting evidence (including an appraisal from an independent expert) that our counsel filed and presented during the hearing. We believe that the services invoiced were non-VAT taxable consultancy services and that the VAT returns are correct as originally filed. We have been vigorously defending against the assessments and are confident that the Tax Court will duly take into account our arguments both on the procedural ground and on the merits of the case. If the Tax Court is decision is unfavorable, we will appeal to the higher courts in order to further defend our interests. However, if we are unable to successfully defend ourselves against the assessments issued by the ITA, it may harm our results of operations and financial condition.

Annual Meeting of Shareholders

On September 16, 2010, we held our annual meeting of shareholders, or the annual meeting. At the annual meeting, our shareholders approved, among other matters, our proposal to amend our amended and restated articles of incorporation to increase the total number of authorized shares of our stock from 810,000,000 shares to 1,210,000,000 shares and to increase the total number of our authorized shares of common stock from 800,000,000 shares of common stock. We amended our amended and restated articles of association on September 16, 2010 to reflect the shareholder approved increases.

Warrants Exchange Agreement

On July 25, 2010, we entered into a privately negotiated exchange agreement with an accredited investor to exchange existing warrants to purchase up to an aggregate of 4,320,000 shares of our common stock at an exercise price of \$1.18 per share for new warrants to purchase up to the same number of shares of common stock at an initial exercise price of \$0.42 per share, or the Warrant Exchange. In connection with the Warrant Exchange, the investor gave up the requirement in its existing warrants that we reserve shares of common stock underlying its warrants, provided that we agreed to reserve such shares if they became available for reservation in certain circumstances. The exchange was exempt from the registration requirements of the Securities Act, pursuant to Section 4(2) thereof.

The new warrants are exercisable at any time on or after the six month and one day anniversary of the date of initial issuance and on or before the four year, six month and one day anniversary of the date of initial issuance. Following receipt of shareholder approval at the annual meeting of our proposal to amend our amended and restated articles of incorporation to increase the authorized shares of common stock available for issuance thereunder, we have reserved the shares of common stock underlying the new warrants.

The Warrant Exchange closed on July 27, 2010.

Recent Series 6 Preferred Stock Financing

On July 25, 2010, we entered into a privately negotiated securities purchase agreement with the purchaser thereunder. Pursuant to the purchase agreement, we agreed to issue to the purchaser, in a private offering pursuant to Section 4(2) of the Securities Act, (i) 4,060 shares of Series 6 Preferred Stock and (ii) warrants to purchase up to an aggregate of 5,800,000 shares of common stock, for an aggregate offering price of \$4.06 million, or the Series 6 Financing.

The warrants issued pursuant to the Series 6 Financing are in substantially the same form as the new warrants that we issued pursuant to the Warrant Exchange.

Pursuant to the securities purchase agreement, the purchaser agreed not to transfer its Series 6 Preferred Stock or the common stock issuable upon conversion of its Series 6 Preferred Stock until after 12:01 a.m., Seattle time on July 28, 2010.

We subsequently registered the shares of Series 6 Preferred Stock and the shares of common stock issuable from time to time upon conversion of the Series 6 Preferred Stock in order to fulfill our obligation under the securities purchase agreement with respect to maintaining, subject to certain conditions, an effective registration statement covering resales of the shares of Series 6 Preferred Stock and common stock.

The Series 6 Financing closed on July 27, 2010.

THE OFFERING

The following is a brief summary of some of the terms of this offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus supplement and the accompanying prospectus.

Securities we are offering	21,000 shares of Series 7 Preferred Stock and warrants to purchase up to 22,702,704 shares of common stock (and the 79,459,461 shares of common stock issuable from time to time upon conversion of the Series 7 Preferred Stock and exercise of the warrants). The purchase price for each share of Series 7 Preferred Stock and a warrant to purchase 1,081 shares of common stock is \$1,000. The shares of Series 7 Preferred Stock and warrants will be issued separately, but can only be purchased together in this offering.
Description of the Series 7 Preferred Stock	
Dividends	Holders of the Series 7 Preferred Stock are entitled to receive dividends equal (on an as if converted to common stock basis) to and in the same form as dividends actually paid on shares of common stock or other junior securities, as and if such dividends are paid. 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. See Dividend Policy.
Optional conversion	The Series 7 Preferred Stock can be converted at the holder s option at any time after issuance into the number of shares of common stock determined by dividing the stated value of the Series 7 Preferred Stock of \$1,000 per share to be converted by the conversion price, which is initially \$0.37. The initial conversion price is subject to adjustment in certain events, including a non-stock fundamental change or a common stock fundamental change, which are explained in more detail under the section entitled Description of Series 7 Preferred Stock.
Automatic conversion	On the first to occur of (i) the one month anniversary of the original issuance date of the Series 7 Preferred Stock, (ii) the date on which 1,000 or less shares of Series 7 Preferred Stock remain outstanding or (iii) the date on which our board of directors determines to do a reverse stock split with respect to our common stock for good faith business reasons, all outstanding shares of Series 7 Preferred Stock shall automatically convert into the number of shares of common stock determined by dividing the aggregate stated value of the Series 7 Preferred Stock being converted by the conversion price then in effect, subject only to the limitations on conversion described below.
Limitations on conversion	We cannot effect a conversion of the Series 7 Preferred Stock, and no holder may request a conversion of its Series 7 Preferred Stock, to the extent such conversion would result in the holder and its affiliates beneficially owning more than 4.99% of our common stock, provided that a holder may elect to increase the conversion threshold to 9.99% of our common stock by providing us with 61 days prior notice. In addition, in the event of an automatic conversion, the conversion threshold will increase to 19.99% without any further action on the part of a holder.
Liquidation preference	In the event of our voluntary or involuntary dissolution, liquidation or winding up, each holder of Series 7 Preferred Stock will be entitled to be paid a liquidation preference equal to the initial stated value of such holder s Series 7 Preferred Stock of \$1,000 per share, plus accrued and unpaid dividends and any other payments that may be due on such shares, before any distribution of assets may be made to holders of capital stock ranking junior to the Series 7 Preferred Stock.

Voting rights	The Series 7 Preferred Stock will have no voting rights, except as otherwise expressly provided in our articles of incorporation or as otherwise required by law. However, so long as at least 20% of the aggregate originally issued shares of the Series 7 Preferred Stock are outstanding, we cannot amend our amended and restated articles of incorporation, amended and restated bylaws or other charter documents so as to materially, specifically and adversely affect the rights of the Series 7 Preferred Stock, repay, repurchase or offer to repay or repurchase or otherwise acquire any of our common stock or other securities junior to the Series 7 Preferred Stock, in each case without the affirmative written consent of holders of a majority of the Series 7 Preferred Stock.
Description of warrants	The Initial Purchasers will receive a warrant to purchase 1,081 shares of common stock for each share of Series 7 Preferred Stock purchased in this offering. The warrants are exercisable at an exercise price of \$0.45 per share of common stock. The warrants are exercisable six months and one day after the date of issuance and expire five years after the date of issuance. See Description of Warrants.
Limitations on exercise	No holder may exercise its warrants to the extent that the exercise would result in the holder and its affiliates beneficially owning 4.99% or more of our common stock, provided that a holder may elect to increase the exercise threshold to 9.99% of our common stock by providing us with 61 days prior notice.
Use of proceeds after expenses	We intend to use the net proceeds from this offering for general corporate purposes, which may include, among other things, paying interest on and/or retiring portions of our outstanding debt, funding research and development, preclinical and clinical trials, the preparation and filing of new drug applications and general working capital. We may also use a portion of the net proceeds from this offering to fund possible investments in, or acquisitions of, complementary businesses, technologies or products. We have recently engaged in limited discussions with third parties regarding such investments or acquisitions, but we have no current agreements or commitments with respect to any investment or acquisition. We can provide no assurance that we will enter into any such agreements or commitments or acquisitions. See Use of Proceeds.
Market for the Series 7 Preferred Stock and warrants	There is no established public trading market for the Series 7 Preferred Stock or warrants and we do not expect a market to develop. In addition, we do not intend to apply for listing the Series 7 Preferred Stock or warrants on any securities exchange.
Market for our common stock	Our common stock is quoted on The NASDAQ Capital Market and on the MTA in Italy under the symbol CTIC. On October 19, 2010, the last reported sale price of our common stock on The NASDAQ Capital Market was \$0.44. For information relating to a notice we received from NASDAQ, see Summary Recent Developments Notice from The NASDAQ

S-4

Stock Market.

RISK FACTORS

You should carefully consider the risks under the heading Risk Factors beginning on page 18 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed with the SEC on February 26, 2010, and beginning on page 34 of our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2010, filed with the SEC on August 8, 2010, which information is incorporated by reference in this prospectus supplement, and the additional risks described below and other information in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference before deciding to invest in our securities. If any of the identified risks actually occur, they could materially adversely affect our business, financial condition, operating results or prospects and the trading price of 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 and the trading price of our securities.

Risks Related to Our Company

We need to raise additional funds and expect that we will need to continue to raise funds in the future, and additional funds may not be available on acceptable terms, or at all; failure to raise significant additional funds may cause us to cease development of our products and operations.

We have substantial operating expenses associated with the development of our product candidates and as of June 30, 2010 we had cash and cash equivalents of \$64.5 million. As of June 30, 2010, our total current liabilities were \$64.6 million, including \$38.5 million related to our 4% convertible senior subordinated notes, or our 4% notes, which were due in July 2010. We repaid the outstanding principal amount and accrued but unpaid interest on our 4% notes in July 2010. The aggregate principal balance of our outstanding 7.5% and 5.75% convertible senior notes as of June 30, 2010 was \$21.2 million. We do not expect that our existing cash and cash equivalents, as well as proceeds received from our offerings to date, will provide sufficient working capital to fund our presently anticipated operations beyond the fourth quarter of 2010. Raising additional capital will likely require that we issue additional shares of our common stock. To the extent that we raise additional capital through the sale of equity securities, or securities convertible into our equity securities, our shareholders may experience dilution of their proportionate ownership of us. We have held preliminary discussions with several investment funds regarding a potential investment in our company, but we have no current agreements or commitments with respect to any investment funds or any other investors (other than this offering). There can be no assurance that our discussions with these investment funds or any other investors will result in an investment in our company or that we will have sufficient earnings, access to liquidity or cash flow in the future to meet our operating expenses and other obligations, including our debt service obligations.

We may not be able to raise such capital or if we can, it may not be on favorable terms. We may seek to raise additional capital through public or private equity financings, partnerships, joint ventures, dispositions of assets, debt financings or restructurings, bank borrowings or other sources. 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 United States and we may be subject to certain contractual limitations, which may increase our costs and adversely affect our ability to obtain additional funding. 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 and brostallicin, and may be forced to cease operations, liquidate our assets and possibly seek bankruptcy protection. A bankruptcy may result in the termination of agreements pursuant to which we license certain intellectual property rights, including the rights to OPAXIO, pixantrone and brostallicin.

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

Our common stock is traded on the MTA 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, and the Borsa Italiana, which ensures the development of the managed market in Italy. Collectively these entities regulate companies listed on Italy s public markets. Conducting our operations in a manner that complies with all of the 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 of the 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 that exceeds, in any twelve-month period, 10% of the number of shares of our common stock outstanding at the beginning of that period. If we are unable to maintain a listing prospectus to cover general financing efforts under Italian law, we may be required to raise money using alternative forms of securities that are not subject to the listing prospectus requirements, including convertible preferred stock and convertible debt not issued on an E.U. regulated market, in lieu of common stock. Such convertible preferred stock and convertible debt might also be converted into common stock without the prior publication of a listing prospectus according to Section 57 of the CONSOB s Rules no. 11971/99, as subsequently amended.

Moreover, on December 23, 2008, CONSOB sent a notice to us requesting that we issue (i) immediately, a press release providing, among other things, information about our debt restructuring plan, the current state of compliance with the relevant covenants regulating our debt and the equity line of credit agreement we entered into with Midsummer Investment Ltd. on July 29, 2008, and (ii) by the end of each month and starting from the month of December 2008, a press release providing certain information relating to our management and financial situation, updated to the previous month, or the Monthly CONSOB Press Release. On July 31, 2009, CONSOB sent us a notice asserting three violations of the provisions of Section 114, paragraph 5 of the Italian Legislative Decree no. 58/98, as follows: (a) the non-disclosure without delay of the press release described above and the subsequent incomplete disclosure of the relevant information through press releases dated January 9, 2009 and January 13, 2009; (b) the non-disclosure of the Monthly CONSOB Press Release in December 2008; and (c) the incomplete disclosure of the Monthly CONSOB Press Release in January 2009. The sanctions established by the Section 193, paragraph 1 of the Italian Legislative Decree no. 58/1998 for such violations are pecuniary administrative sanctions amounting to between 5,000 and 500,000, applicable to each one of the three asserted violations. According to the applicable Italian legal provisions, CONSOB may impose such administrative sanctions by means of a decree stating the grounds of its decision only after evaluating our possible defenses that were submitted to CONSOB on August 28, 2009 (within 30 days of July 31, 2009, the notification date of the relevant charges, according to the applicable Italian rules). On May 5, 2010, CONSOB (i) notified us that it has begun the preliminary investigation for its decision on these administrative proceedings and (ii) provided us with a preliminary investigation report in reply to our defenses submitted on August 28, 2009. On June 4, 2010 (within 30 days of May 5, 2010, the notification date of the beginning of the aforesaid preliminary investigation, according to the applicable Italian rules), we submitted further defenses that CONSOB will have to evaluate before imposing any possible administrative sanctions.

On December 10, 2009, CONSOB sent us a notice claiming two violations of the provisions of Section 114, paragraph 1 of the Italian Legislative Decree no. 58/98 due to the asserted late disclosure of certain information then reported, at CONSOB s request, in the press release disseminated on December 19, 2008 and March 23, 2009. Such information concerned, respectively: (i) the conversion by BAM Opportunity Fund LP of 9.66% notes into shares of common stock that occurred between October 24, 2008 and November 19, 2008; and (ii) the contents of the opinion expressed by Stonefield Josephson, Inc., an independent registered public accounting firm, with respect to our 2008 financial statements. The sanctions established by the Section 193, paragraph 1 of the Italian Legislative Decree no. 58/98 for such violations are pecuniary administrative sanctions amounting to between €5,000 and €500,000, applicable to each one of the two asserted violations. According to the applicable Italian legal provisions, CONSOB may impose such administrative sanctions by means of a decree stating the grounds of its decision only after evaluating our possible defenses that were submitted to CONSOB on January 8, 2010 (within 30 days of December 10, 2009, the notification date of the relevant charges, according to the applicable Italian rules). On July 12, 2010, CONSOB (i) notified us that it has begun the preliminary investigation for its decision on these administrative proceedings and (ii) provided us with a preliminary investigation report in reply to our defenses submitted on January 8, 2010. On August 12, 2010 (within 30 days of July 12, 2010, the notification date of the beginning of the aforesaid preliminary investigation, according to the applicable Italian rules), we submitted further defenses that CONSOB will have to evaluate before imposing any possible administrative sanctions.

We may owe additional amounts for value added taxes related to our operations in Europe.

Our European operations are subject to VAT, which is usually applied to all goods and services purchased and sold throughout Europe. The VAT receivable is \$5.2 million and \$6.3 million as of June 30, 2010 and December 31, 2009. On April 14, 2009 and December 21, 2009, the Italian Tax Authority, or ITA, issued notices of assessment to CTI (Europe) based on the ITA s audit of CTI (Europe) s VAT returns for the years 2003 and 2005. On June 25, 2010, the ITA issued notices of assessment to CTI (Europe) for the years 2006 and 2007 based on similar findings of the 2003 and 2005 assessments. The ITA audits concluded that CTI (Europe) did not collect and remit VAT on certain invoices issued to non-Italian clients for services performed by CTI (Europe). The assessments, including interest and penalties, for the years 2003, 2005, 2006 and 2007 are 0.5 million, 5.5 million, 2.5 million and 0.8 million, as of June 30, 2010, respectively. On July 14, 2010, the ITA issued a notice of deposit payment to CTI (Europe) based on the 2005 assessment including interest and collection fees for an amount of €0.9 million, payable in the third quarter 2010. We successfully filed a petition with the Provincial Tax Court of Milan, or the Tax Court, for suspension of the 2005 notice of deposit payment. On September 28, 2010, the merits of the case for the 2005 assessment were discussed in a public hearing before the Tax Court, which has reserved its decision in order to carefully review the arguments, relevant documents and other supporting evidence (including an appraisal from an independent expert) that our counsel filed and presented during the hearing. We believe that the services invoiced were non-VAT taxable consultancy services and that the VAT returns are correct as originally filed. We have been vigorously defending against the assessments and expect that the Tax Court will take into account our arguments both on the procedural ground and on the merits of the case. If the Tax Court s decision is unfavorable, we will appeal to the higher courts in order to further defend our interests. However, if we are unable to defend ourselves against the assessments and if we receive an assessment for subsequent years, it may harm our results of operations and financial condition.

If there is an adverse outcome in the securities class actions and shareholder derivative litigation that have been filed against us, our business may be harmed.

We and certain of our officers and directors are named as defendants in purported securities class action and shareholder derivative lawsuits filed in the U.S. District Court for the Western District of Washington. These securities class action lawsuits are brought on behalf of a putative class of purchasers of our securities from May 5, 2009 through March 19, 2010, and seek unspecified damages. As is typical in this type of litigation, additional purported securities class action and shareholder derivative lawsuits containing substantially similar allegations could be filed in the near future. All of the purported securities class actions have been consolidated into one securities class action, a lead plaintiff has been appointed, and a consolidated amended complaint has been filed. Defendants are required to file a response to the amended complaint on or before October 27, 2010. We expect that all of the shareholder derivative lawsuits will also be consolidated into one derivative action. Motions are currently pending concerning lead plaintiff appointment in the derivative actions. As with any litigation proceeding, we cannot predict with certainty the eventual outcome of pending litigation. Furthermore, we may have to incur substantial expenses in connection with these lawsuits. In the event of an adverse outcome, our business could be materially harmed.

Our common stock is listed on The NASDAQ Capital Market and the MTA in 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 Panel approved this transfer after our market capitalization did not comply with the minimum market capitalization required for companies listed on The NASDAQ Global Market, and we presented a plan to the Panel for regaining compliance with NASDAQ Marketplace Rules. On January 23, 2009, we received an Additional Staff Determination Letter from NASDAQ that stated that NASDAQ staff had concluded that we had violated Nasdaq Marketplace Rule 4350(i)(1)(C) (now Nasdaq Marketplace Rule 5635), 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 February 18, 2009, we updated the Panel on our plan for regaining compliance and requested an extension of the deadline to regain compliance with the minimum market capitalization requirement for The NASDAQ Capital Market. On March 6, 2009, we were notified by NASDAQ that the Panel had determined to continue the listing of our common stock on The NASDAQ Capital Market, subject to the condition that, on or before April 6, 2009, we demonstrate compliance with all applicable standards for continued listing on The NASDAQ Capital Market, including the \$35 million minimum market capitalization requirement. In addition, the Panel issued a public reprimand for our prior failures to comply with the shareholder approval requirements and late filing of Listing of Additional Shares forms. On April 2, 2009, we were notified by NASDAQ that we had complied with the Panel s decision dated March 6, 2009, and, accordingly, the Panel had determined to continue the listing of our common stock on The NASDAQ Capital Market.

NASDAQ reinstated the \$1.00 minimum bid price requirement on August 3, 2009 and there can be no assurance that our common stock price will be \$1.00 or above. On May 3, 2010, we received notice from NASDAQ indicating that for the last 30 consecutive business days the closing bid price of our common stock was below the minimum \$1.00 per share requirement for continued listing of our common stock on The NASDAQ Capital Market under NASDAQ Marketplace Rule 5550(a)(2). This notification has no immediate effect on the listing of or the ability to trade our common stock on The NASDAQ Capital Market. In accordance with NASDAQ Marketplace Rule 5810(c)(3)(A), we have been provided a grace period of 180 calendar days, or until November 1, 2010, to regain compliance. We will achieve compliance if the bid price of our common stock closes at \$1.00 per share or more for a minimum of ten consecutive trading days before November 1, 2010. Alternatively, we may be eligible for an additional 180-day grace period if we meet all of the initial listing standards of NASDAQ, with the exception of the closing bid price. We believe that we are currently in compliance with all of the initial listing standards other than the minimum shareholders equity standard and the closing bid price described above. We believe that the net proceeds from this offering will enable us to achieve the minimum shareholders equity requirement and, therefore, comply with all of the initial listing standards prior to November 1, 2010. However, NASDAQ is responsible for determining whether the net proceeds from this offering enable us to achieve the minimum shareholders equity requirement. If NASDAQ agrees with our determination, then we believe that we will be eligible for the additional 180-day grace period. There can be no assurance that our closing bid price will achieve \$1.00 per share or more for the applicable period or that we will successfully close this offering or achieve the minimum shareholders equity. If we are unable to attain compliance with the minimum bid price, whether by effecting a reverse stock split of our common stock or otherwise, or if we fail to meet all of the initial listing standards, with the exception of the closing bid price, we may be delisted. In addition, if we fail to maintain the minimum value of listed securities, we may be delisted. In the event that we receive a delisting determination from NASDAQ, we may request a hearing before the Panel. Following the hearing request, our common stock would continue to be listed on The NASDAQ Capital Market pending the conclusion of the hearing process and during any extension period which may be granted by the Panel. There can be no assurance that the Panel would delay an unfavorable delisting decision or grant any extension period.

The level of trading activity of our common stock may decline if it is no longer listed on The NASDAQ Capital Market. Furthermore, our failure to maintain a listing on The NASDAQ Capital Market may constitute an event of default under certain of our indebtedness which would accelerate the maturity date of such debt. As such, if our common stock ceases to be listed for trading on The NASDAQ Capital Market for any reason, it may harm our stock price, increase the volatility of our stock price and make it more difficult for investors to sell shares of our common stock. In the event our common stock is delisted from The NASDAQ Capital Market, 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 Capital Market may have on our listing with the Borsa Italiana.

Although we continue 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 determine that trading in our common stock is inadvisable. Trading in our common stock was halted by the Borsa Italiana on February 10, 2009, and, as a consequence, trading in our common stock was also halted by NASDAQ. After we provided CONSOB with additional information and clarification on our business operations and financial condition, as requested, and published a press release containing such information in Italy, the Borsa Italiana and NASDAQ lifted the trading halts on our common stock. In addition, on March 23, 2009, the Borsa Italiana halted trading of our common stock on the MTA and resumed trading prior to opening of the MTA the next day after we filed a press release regarding the explanatory paragraph in our auditor s reports on our December 31, 2008 and 2007 consolidated financial statements regarding their substantial doubt as to our ability to continue as a going concern. As a consequence, NASDAQ also halted trading in our common stock on March 23, 2009, but re-initiated trading later that day. Although we file press releases with CONSOB at the end of each month regarding our business and financial condition, CONSOB may make additional inquiries about our business and financial conditions at any time, and there can be no guarantee that the Borsa Italiana, CONSOB or NASDAQ will not halt trading in our shares again in the future.

If our common stock ceases to be listed for trading on The NASDAQ Capital Market or the MTA, or both, for any reason, or if trading in our stock is halted or suspended on The NASDAQ Capital Market or the MTA, or both, such events may harm the trading price of our securities, increase the volatility of the trading price of our securities and make it more difficult for investors to buy or sell shares of our common stock. Moreover, if our common stock ceases to be listed for trading on The NASDAQ Capital Market or if trading in our stock is halted or suspended on The NASDAQ Capital Market, we may become subject to certain obligations. In addition, if we are not listed on The NASDAQ Capital Market and/or if our public float falls 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.

Risks Related to this Offering

There is no public market for the Series 7 Preferred Stock or warrants being offered in this offering.

There is no established public trading market for the Series 7 Preferred Stock or warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Series 7 Preferred Stock or warrants on any securities exchange. Without an active market, the liquidity of the Series 7 Preferred Stock and warrants will be limited.

Purchasers of Series 7 referred Stock and warrants who convert their Series 7 Preferred Stock into common stock or exercise their warrants for shares of common stock will incur immediate dilution.

Upon conversion or exercise of your shares of Series 7 Preferred Stock or warrants for shares of common stock, as the case may be, you will experience immediate and substantial dilution because the per share conversion price of your shares of Series 7 Preferred Stock and the exercise price of your warrants will be higher than the net tangible book value per share of the outstanding common stock immediately after this offering. In addition, you will experience dilution when we issue additional shares of common stock that we are permitted or required to issue under outstanding options and warrants and under our stock option plan or other employee or director compensations plans.

Holders of our Series 7 Preferred Stock or warrants will have no rights as a holder of common stock until they acquire common stock.

Until you acquire shares of common stock upon conversion or exercise of the Series 7 Preferred Stock and warrants, as the case may be, you will have no rights with respect to our common stock, other than the right of the convertible preferred stock to receive dividends equal to and in the same term as dividends actually paid on common stock, including rights to vote or respond to tender offers. Upon conversion or exercise of your Series 7 Preferred Stock or warrants, as the case may be, you will be entitled to exercise the rights of a holder of common stock only as to matters for which the record date occurs after the conversion or exercise date.

Risks Related to Holders of our Common Stock

Shares of common stock are equity securities and are subordinate to our existing and future indebtedness.

Shares of our common stock are common equity interests. This means that our common stock ranks junior to any preferred stock that we may issue in the future, to our indebtedness and to all creditor claims and other non-equity claims against us and our assets available to satisfy claims on us, including claims in a bankruptcy or similar proceeding. Our existing and future indebtedness may restrict payment of dividends on our common stock.

Additionally, unlike indebtedness, where principal and interest customarily are payable on specified due dates, in the case of our common stock, (i) dividends are payable only when and if declared by our board of directors or a duly authorized committee of our board of directors, and (ii) as a corporation, we are restricted to making dividend payments and redemption payments out of legally available assets. We have never paid a dividend on our common stock and have no current intention to pay dividends in the future. Furthermore, our common stock places no restrictions on our business or operations or on our ability to incur indebtedness or engage in any transactions, subject only to the voting rights available to shareholders generally.

The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on The NASDAQ Capital Market.

The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on The NASDAQ Capital Market. These conditions may result in (i) volatility in the level of, and fluctuations in, the market prices of stocks generally and, in turn, our shares of common stock, and (ii) sales of substantial amounts of our common stock in the market, in each case that could be unrelated or disproportionate to changes in our operating performance.

There may be future sales or other dilution of our equity, which may adversely affect the market price of our shares of common stock.

We are not restricted from issuing additional shares of common stock or preferred stock, including any securities that are convertible into or exchangeable for, or that represent the right to receive, shares of common stock or preferred stock or any substantially similar securities. The market price of our shares of common stock or preferred stock could decline as a result of sales of a large number of shares of our common stock or preferred stock or similar securities in the market, or the perception that such sales could occur in the future.

The market price of our common stock 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 October 19, 2010, our stock price has ranged from a low of \$0.12 to a high of \$1.40. 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;

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 2010 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 selling;

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, we and certain of our officers and directors are named as defendants in purported securities class action and shareholder derivative lawsuits brought on behalf of a putative class of purchasers of our securities from May 5, 2009 through March 19, 2010. These lawsuits seek unspecified damages and, as with any litigation proceeding, we cannot predict with certainty the eventual outcome of pending litigation. Furthermore, we may have to incur substantial expenses in connection with these lawsuits 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 us 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 currently face or 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, in our shareholder rights plan, or rights plan, 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 amended and restated articles of incorporation and amended and restated 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 of directors so that only approximately one third of our board of directors is elected each year;

elimination of cumulative voting in the election of directors;

procedures for advance notification of shareholder nominations and proposals;

the ability of our board of directors to amend our amended and restated 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.

Pursuant to our rights plan, an acquisition of 20% or more of our common stock could result in the exercisability of the preferred stock purchase right accompanying each share of our common stock (except those held by a 20% shareholder, which become null and void), thereby entitling the holder to receive upon exercise, in lieu of a number of units of preferred stock, that number of shares of our common stock having a market value of two times the exercise price of the right. The existence of our rights plan could have the effect of delaying, deferring or preventing a third party from making an acquisition proposal for us and may inhibit a change in control that some, or a majority, of our stockholders might believe to be in their best interest or that could give our stockholders the opportunity to realize a premium over the then-prevailing market prices for their shares.

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

We estimate that the net proceeds of this offering, after deducting placement agent fees and our estimated offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in this offering, will be approximately \$19.6 million.

We currently intend to use the net proceeds from this offering for working capital and for general corporate purposes, which may include, among other things, paying interest on and/or retiring portions of our outstanding debt, funding research and development, preclinical and clinical trials, the preparation and filing of new drug applications and general working capital. Set forth below are details of certain of our outstanding indebtedness that we may retire, in whole or in part, with the net proceeds from this offering (principal amounts as of June 30, 2010):

our approximately \$10.3 million 7.5% Convertible Senior Notes due 2011 mature on April 30, 2011; and

our approximately \$10.9 million 5.75% Convertible Senior Notes due 2011 mature on December 15, 2011. We may also use a portion of the net proceeds from this offering to fund possible investments in, or acquisitions of, complementary businesses, technologies or products. We have recently engaged in limited discussions with third parties regarding such investments or acquisitions, but we have no current agreements or commitments with respect to any investment or acquisition. We can provide no assurance that we will enter into any such agreements or commitments or consummate any such investments or acquisitions.

We cannot estimate precisely the allocation of the net proceeds from this offering among these uses. The amounts and timing of the expenditures may vary significantly, depending on numerous factors, including the progress of our clinical trials and other development efforts, as well as the amount of cash used in our operations. Accordingly, our management will have broad discretion in the application of the net proceeds of this offering. We reserve the right to change the use of proceeds as a result of certain contingencies such as competitive developments, opportunities to acquire businesses, technologies or products and other factors. Pending the uses described above, we may temporarily invest the net proceeds of this offering in short- and medium-term interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DETERMINATION OF OFFERING PRICE

Prior to this offering, there was no public market for the Series 7 Preferred Stock or warrants. The terms and conditions of the Series 7 Preferred Stock, including the dividend rate and the conversion price, and the warrants, including the exercise price, were determined by negotiation by us and the placement agent. The principal factors considered in determining these terms and conditions include:

the market price of our common stock;

the information set forth in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference, and otherwise available to the placement agent;

our history and prospects and the history of, and prospects for, the industry in which we compete;

our past and present financial performance and an assessment of our management;

our prospects for future earnings and the present state of our development;

the general condition of the securities markets at the time of this offering;

the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and

other factors deemed relevant by the placement agent and us. RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table sets forth our ratio of earnings to combined fixed charges and preferred stock dividends for each of the periods indicated:

	Six months ended					
	June 30, Year ended De			ed Dece	cember 31,	
	2010 2009 2008 2007		2007	2006	2005	
Ratio of earnings to combined fixed charges and preferred stock dividends (1)						

(1) Earnings were not sufficient to cover combined fixed charges and preferred stock dividends. 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 six months ended June 30, 2010, and for the years ended December 31, 2009, 2008, 2007, 2006 and 2005, were insufficient to cover fixed charges, and fixed charges and preferred stock dividends, by \$97.8,

\$116.8, \$202.9, \$148.3, \$135.8 and \$102.5 (in millions), respectively. For this reason, no ratios are provided for these periods. 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. 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.

DESCRIPTION OF SERIES 7 PREFERRED STOCK

The material terms and provisions of the Series 7 Preferred Stock being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. This summary is subject to, and qualified in its entirety by, the rights, preferences and privileges of the Series 7 Preferred Stock set forth in the articles of amendment to our amended and restated articles of incorporation to be filed as an exhibit to our Current Report on Form 8-K which we expect to file with the SEC in connection with this offering.

Rank

The Series 7 Preferred Stock will, with respect to dividend rights and rights upon our liquidation, dissolution or winding up, rank senior to our common stock and, so long as at least 20% of the aggregate originally issued shares of the Series 7 Preferred Stock are outstanding, we may not repay, repurchase or offer to repay or repurchase or otherwise acquire any material amount of common stock or other securities junior to the Series 7 Preferred Stock except for repurchases of up to 30,000,000 shares of common stock in any 12-month period from employees, officers, directors, consultants or others who perform services for us and who are subject to an agreement with us providing a right of repurchase of such shares at cost or on the occurrence of certain events, such as termination of employment.

Dividends

Holders of Series 7 Preferred Stock are entitled to receive dividends on shares of the Series 7 Preferred Stock equal (on an as if converted to common stock basis) to and in the same form as dividends actually paid on shares of our common stock or other junior securities. All accrued but unpaid dividends on the Series 7 Preferred Stock shall increase the stated value of the Series 7 Preferred Stock, but when such dividends are actually paid such increase shall be rescinded.

Liquidation Preference

Upon our voluntary or involuntary dissolution, liquidation or winding up, holders of the Series 7 Preferred Stock will be entitled to receive the stated value of such holder s shares of Series 7 Preferred Stock of \$1,000 per share plus any accrued and unpaid dividends and other payments that may be due on the shares before the holders of common stock or any of our other junior securities receive any payments from such liquidation. In the event that the amount available for payment of this liquidation preference is less than the full amount of the stated value of all shares of Series 7 Preferred Stock then outstanding, the assets to be distributed to the holders of the Series 7 Preferred Stock will be ratably distributed among such holders in accordance with the respective amounts that would be payable on such holder s shares if the liquidation preference was paid in full.

Conversion

Optional Conversion

The Series 7 Preferred Stock shall be convertible at the option of the holders thereof at any time after issuance into the number of registered shares of common stock determined by dividing the aggregate stated value of the Series 7 Preferred Stock being converted by the conversion price then in effect. The initial conversion price is \$0.37 and is subject to adjustment as described below. This right to convert is limited by the beneficial ownership limitation described below.

Automatic Conversion

On the first to occur of (i) the one month anniversary of the original issuance date of the Series 7 Preferred Stock, (ii) the date on which 1,000 or less shares of Series 7 Preferred Stock remain outstanding or (iii) the date on which our board of directors determines to do a reverse stock split with respect to our common stock for good faith business purposes, all outstanding shares of Series 7 Preferred Stock shall automatically convert into the number of registered shares of common stock determined by dividing the aggregate stated value of the Series 7 Preferred Stock being converted by the conversion price then in effect. This automatic conversion is limited by the beneficial ownership limitation described below.

Beneficial Ownership Limitation

We may not effect a conversion, and no holder may request conversion, of the Series 7 Preferred Stock to the extent, following such conversion, the holder and its affiliates would beneficially own more than 4.99% of our common stock, provided that a holder may elect to increase the conversion threshold to 9.99% of our common stock by providing us with 61 days prior notice. In addition, in the event of an automatic conversion, the conversion threshold will increase to 19.99% without any further action on the part of a holder. The amount of beneficial ownership of a holder and its affiliates will be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations of that section.

Conversion Price Adjustment

Stock Dividends and Stock Splits. If we pay a stock dividend or otherwise make a distribution payable in shares of common stock on shares of common stock or any common stock equivalents, subdivide or combine our outstanding common stock, or reclassify our common stock in such a way that we issue additional shares of our capital stock, the conversion price will be adjusted by multiplying the then-existing conversion price by a fraction, the numerator of which is the number of shares outstanding immediately before the distribution, dividend, adjustment or recapitalization and the denominator of which is the number of shares outstanding immediately after such action.

Rights Offerings. If we issue rights, options or warrants to holders of common stock giving such holders a right to subscribe for or purchase shares of common stock at a price per share lower than the volume weighted average price of the common stock on the record date for such issuance and do not offer the same rights to the holders of the Series 7 Preferred Stock, the conversion price will be adjusted to reflect the rights offering by multiplying such conversion price by a fraction, the numerator of which is the number of shares outstanding before such record date plus the number of shares which the aggregate offering price (assuming full subscription) would purchase at the volume weighted average price of the common stock on such record date and the denominator of which is the number of shares of common stock outstanding on the record date plus the aggregate number of shares offered for subscription or purchase.

Pro Rata Distributions. If we distribute (other than as dividend) evidences of our indebtedness, assets (including cash or cash dividends), warrants or other rights to subscribe for our securities (other than common stock) to the holders of common stock, then the conversion price will be adjusted by multiplying the conversion price in effect immediately prior to the record date for such distribution by a fraction, the numerator of which is the volume weighted average price of the common stock on such record date minus the fair market value at such record date of the distributed evidence of indebtedness, asset, warrant or other right applicable to one share of common stock, such fair market value to be determined by the board in good faith, and the denominator of which is the volume weighted average price of the common stock on such record date.

Fundamental Transaction. If we effect a fundamental transaction (as defined below), then upon any future conversion of the Series 7 Preferred Stock, the holders will have the right to receive, for each share of common stock they would have received upon such conversion, the same kind and amount of securities, cash or property as such holder would have been entitled to receive in the transaction had it been the holder of a share of common stock immediately prior to the transaction. The term fundamental transaction means any of the following:

a merger or consolidation of the Company with or into another entity;

the sale of all or substantially all of the assets of the Company in one transaction or a series of related transactions;

any tender offer or exchange offer allowing holders of common stock to tender or exchange their shares for cash, property or securities, regardless of who makes such offer; or

any reclassification of common stock or any compulsory share exchange by which common stock is effectively converted into or exchanged for other securities, cash or property.

If the holders of common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, the holders of Series 7 Preferred Stock will be given the same choice on conversion of such holder s shares.

Voting Rights

The Series 7 Preferred Stock shall have no voting rights, except to the extent expressly provided in our amended and restated articles of incorporation or as otherwise required by law. However, so long as at least 20% of the aggregate initially issued shares of Series 7 Preferred Stock are outstanding, we cannot take any of the following actions without the affirmative consent of holders of a majority of the outstanding Series 7 Preferred Stock:

amend our amended and restated articles of incorporation, amended and restated bylaws or other charter documents so as to materially, specifically and adversely affect the rights of any holder with respect to the Series 7 Preferred Stock;

repay, repurchase or offer to repay or repurchase or otherwise acquire any of our common stock, common stock equivalents or securities junior to the Series 7 Preferred Stock, except the repurchase of up to 30,000,000 shares of common stock in any 12-month period from employees, officers, directors, consultants or others performing services for the Company or any of its subsidiaries under agreements approved by a majority of our board of directors or under which we have the option to repurchase such shares at cost or at cost on the occurrence of certain events such as termination of employment;

authorize or create any class of senior preferred stock with respect to dividend rights or liquidation preference; or

enter into any agreement or understanding to take any of the actions listed above.

DESCRIPTION OF WARRANTS

The material terms and provisions of the warrants being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. This summary is subject to, and qualified in its entirety by, the terms set forth in the Common Stock Purchase Warrant to be filed as an exhibit to our Current Report on Form 8-K, which we expect to file with the SEC in connection with this offering.

General

The warrants will be exercisable six months and one day after the date of issuance and will expire five years after the date of issuance. The warrants will be exercisable, at the option of the holder, upon the surrender of the warrants to us and the payment in cash of the exercise price of the shares of common stock being acquired upon exercise of the warrants. However, if at the time of exercise there is no effective registration statement registering the issuance of the shares of common stock issuable upon exercise of the warrants to the holder and all such shares are not then registered for resale by the holder, the holder may exercise the warrants by means of a cashless exercise or net exercise. The warrants will not be listed on any national securities exchange.

The exercise price per share of common stock purchasable upon exercise of the warrants is \$0.45 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) that the holders of the warrants would have been entitled to receive upon the occurrence of the fundamental transaction as if the warrant had been exercised immediately before the fundamental transaction. If any holder of common stock is given a choice of consideration to be received in the fundamental transaction, then the holders of the warrants shall be given the same choice upon the exercise of the warrants following the fundamental transaction.

As of October 18, 2010, other warrants to purchase approximately 71.9 million shares of common stock are outstanding.

Beneficial Ownership Limitation

No holder may exercise its warrants to the extent that the exercise would result in the holder and its affiliates beneficially owning 4.99% or more of our common stock, provided that a holder may elect to increase the exercise threshold to 9.99% by providing us with 61 days prior notice. The amount of beneficial ownership of the holder and its affiliates will be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations of that section.

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 amended and restated bylaws and all applicable provisions of Washington law.

General

We are authorized to issue 1,200,000,000 shares of common stock, no par value, and 10,000,000 shares of preferred stock, no par value. As of October 18, 2010, there were 758,461,809 shares of common stock outstanding, warrants to purchase approximately 71.9 million shares of common stock outstanding.

On April 15, 2007, we effected a 1-for-4 reverse stock split of our common stock and on August 31, 2008, we effected a 1-for-10 reverse stock split of our common stock.

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 our liquidation, dissolution or winding up, 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 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.

General Description of Preferred Stock

Our 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 effects of the issuance of any shares of preferred stock upon the rights of holders of the common stock until our 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; or

delaying or preventing a change in control of our company without further action by the shareholders. Anti-Takeover Effects of Provisions of Washington Law, Our Charter and Bylaws and Our Rights Plan

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 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 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 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 our 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. 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.

In connection with our rights plan, one preferred stock purchase right was distributed for each common share held as of the close of business on January 7, 2010. Initially, the rights are not exercisable and are attached to, and trade with, all of the shares of our common stock outstanding as of, and issued subsequent to, the record date. Each right, if and when it becomes exercisable, will entitle the holder to purchase one ten-thousandth of a share of a new series of junior participating cumulative preferred stock for \$6.00, subject to standard adjustment in the rights plan. The rights will become exercisable for our preferred stock if a person or group acquires 20% or more of our common stock. Upon acquisition of 20% or more of our common stock, the board of directors could decide that each right (except those held by a 20% shareholder, which become null and void) would become exercisable, entitling the holder to receive upon exercise, in lieu of a number of units of preferred stock, that number of shares of our common stock to permit the exercise in full of the rights, the holder may receive units of preferred stock, other securities, cash or property or any combination of the foregoing.

If we are acquired in a merger or other business combination transaction after any such event, each holder of a right, except those held by a 20% shareholder, which become null and void, would then have the right to receive, upon exercise, common stock of the acquiring company having a market value equal to two times the exercise price of the right.

The board of directors may redeem the rights for \$0.0001 per right or terminate the rights plan at any time prior to an acquisition by a person or group holding 20% or more of our common stock. The rights plan will expire on January 7, 2013.

Transfer Agent and Registrar

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

PLAN OF DISTRIBUTION

We are offering through Rodman & Renshaw, LLC, who acted as our sole placement agent in connection with this offering, or the placement agent, 21,000 shares of Series 7 Preferred Stock and warrants to purchase up to 22,702,704 shares of common stock (and the 79,459,461 shares of common stock issuable from time to time upon conversion of the Series 7 Preferred Stock and exercise of the warrants). The purchase price for each share of Series 7 Preferred Stock and a warrant to purchase 1,081 shares of common stock is \$1,000. In connection with this offering, we will pay fees to the placement agent. The placement agent will be working solely on a reasonable best efforts basis and is not purchasing or selling any securities offered by this prospectus supplement or the accompanying prospectus, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of securities. Therefore, we may not sell the entire amount of Series 7 Preferred Stock and warrants offered pursuant to this prospectus supplement.

We currently anticipate that closing of the sale of Series 7 Preferred Stock and warrants will occur on October 22, 2010.

On October 19, 2010, we entered into a letter agreement with the placement agent to serve as exclusive placement agent for purchasers of our securities for a period of 10 days. Pursuant to the letter agreement, we will pay the placement agent at closing a cash fee equal to 5% of the aggregate gross proceeds raised in this offering, plus warrants to purchase shares of common stock in an amount equal to 2% of the aggregate number of shares of common stock issuable upon conversion of the Series 7 Preferred Stock. The following table shows the per share of Series 7 Preferred Stock and warrants total fees we will pay to the placement agent assuming all of the Series 7 Preferred Stock and warrants offered by this prospectus supplement are issued and sold by us.

	Per share	of Series 7		
	Preferred Stock			
	nd			
Placement Agent Fees	wa	Total		
Offering price per share of Series 7 Preferred Stock and				
warrant	\$	50	\$ 1,050,000	

Because there is no minimum offering amount required as a condition to closing, the actual total may be less than the total set forth above.

We have also agreed to pay or reimburse the placement agent for expenses incurred in connection with the offering, up to the lesser of \$30,000 or 1.6% of the aggregate gross proceeds received by us in this offering. The estimated offering expenses payable by us, excluding the placement agency fee, are \$320,000, which include legal, accounting and printing costs, and various other fees associated with registering and listing the shares of common stock issuable from time to time upon conversion of the Series 7 Preferred Stock or exercise of the warrants. The estimated offering expenses also include a cash fee of \$50,000 payable at closing to Trout Capital LLC for financial advisory services.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act. We may also be required to contribute to payments the placement agent may be required to make in respect of such liabilities.

The agreement with the placement agent and the purchase agreement with the Initial Purchasers will be included as exhibits to a Current Report on Form 8-K that will be filed with the SEC in connection with this offering.

We are subject to a lock-up agreement for a period of 30 days following the date of this prospectus supplement. Pursuant to the lock-up agreement, we have agreed that neither we nor any subsidiary will, without the prior consent of the Initial Purchasers, (i) directly or indirectly, issue, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock or file any registration statement under the Securities Act (other than a Registration Statement on Form S-8) with respect to any of the foregoing, or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of our common stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of common stock or such other securities, in cash or otherwise. The lock-up agreement does not apply to (a) the Series 7 Preferred Stock and warrants to be issued and sold hereunder or issuable upon conversion or exercise thereof, (b) issuances of shares of common stock upon the exercise of warrants issued to the placement agent, if any, (c) issuances of shares of common stock issuable upon conversion or exchange of currently outstanding convertible notes, (d) issuances of shares of common stock upon the exercise of currently outstanding warrants or amendments to the warrant agreements related thereto, (e) granting options or other securities under our incentive compensation and equity incentive plans existing on the date hereof or issuances of shares of common stock issuable in connection with outstanding awards thereunder as of the date hereof, (f) issuances of shares of common stock issuable pursuant to agreements in effect as of the date hereof or amendments related thereto, (g) i

Table of Contents

shares of common stock subject to shareholder approval, provided however, that in the case of clauses (c) and (d) above, no shares of common stock shall be issued as a result of an amendment to such securities after the date hereof and prior to the expiration of the 30 day lock-up period.

Rodman & Renshaw, LLC may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by them and any profit realized on the resale of the securities sold by them while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As underwriters, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock and warrants by the placement agent. Under these rules and regulations, the placement agent:

may not engage in any stabilization activity in connection with our securities; and

may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution. The placement agent has informed us that it does not intend to engage in overallotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

A prospectus supplement and the accompanying prospectus in electronic format may be made available on the websites maintained by the placement agent and the placement agent may distribute the prospectus supplement and the accompanying prospectus electronically.

CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

All purchasers of Series 7 Preferred Stock and warrants are advised to consult their own tax advisors regarding the federal, state, local and foreign tax consequences of the purchase, ownership, conversion or exercise, as the case may be, and disposition of the Series 7 Preferred Stock and warrants and the ownership and disposition of shares of common stock issuable upon conversion of Series 7 Preferred Stock and exercise of warrants in their particular situations.

LEGAL MATTERS

Certain legal matters in connection with the securities offered hereby will be passed upon for us by O Melveny & Myers LLP of San Francisco, California. Certain legal matters relating to Washington law will be passed upon for us by Karr Tuttle Campbell of Seattle, Washington. Weinstein Smith LLP of New York, New York is acting as counsel for the placement agent.

PROSPECTUS

Making cancer more treatable

Common Stock

Preferred Stock

Warrants

From time to time, we may offer and sell in one or more offerings:

shares of our common stock;

shares of our preferred stock; and

warrants to purchase common stock, preferred stock and/or debt securities.

We may offer these securities in amounts, at prices and on terms determined at the time of each offering thereof. Each time we offer securities using this prospectus, we will provide specific terms of the securities and the offering in one or more supplements to this prospectus. The prospectus supplements may also add, update or change the information in this prospectus and will also describe the specific manner in which we will offer the securities.

This prospectus may not be used to sell securities unless accompanied by a prospectus supplement. You should carefully read this prospectus and any accompanying prospectus supplement, including the information incorporated by reference, prior to investing in any of our securities.

Our common stock is quoted on The NASDAQ Capital Market and on the MTA stock market in Italy under the symbol CTIC . On August 18, 2009, the last reported sale price of our common stock on The NASDAQ Capital Market was \$1.57.

We do not expect our preferred stock or warrants to be listed on any securities exchange or over-the-counter market unless otherwise described in the applicable prospectus supplement.

Investing in our securities involves a high degree of risk. See the Risk Factors section contained in the applicable prospectus supplement and in the documents we incorporate by reference in this prospectus to read about factors you should consider before investing in our securities.

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 August 19, 2009

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND MORE INFORMATION	1
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	2
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS	4
<u>USE OF PROCEEDS</u>	4
DIVIDEND POLICY	4
LEGAL MATTERS	4
EXPERTS	4

i

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under the shelf registration process, we may, from time to time, sell common stock, preferred stock or warrants, or any combination of these securities, in one or more offerings. There is no limit on the aggregate amount of the securities described in this prospectus that we may sell pursuant to the registration statement.

This prospectus provides you with a general description of the securities we may offer. Each time we sell any securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering, including the specific amounts, prices and terms of the securities offered. Any prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus, any prospectus supplement, any documents that we incorporate by reference in this prospectus and any prospectus supplement, and the additional information described below under Where You Can Find More Information before making an investment decision. You should rely only on the information contained or incorporated by reference in this prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

You should not assume that the information in this prospectus, any prospectus supplement or any documents we incorporate by reference is accurate as of any date other than the date on the front of those documents only. Our business, financial condition, results of operations and prospectus may have changed since those dates.

This prospectus contains and incorporates by reference market data, industry statistics and other data that have been obtained from, or compiled from, information made available by third parties. We have not independently verified their data.

In this prospectus, the terms CTI, Company, we, us, our and similar terms refer to Cell Therapeutics, Inc., a Washington corporation, and its subsidiaries, unless the context otherwise requires.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, or 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 to the public free of charge at www.sec.gov. Copies of certain information filed by use with the SEC are also available on our website at www.celltherapeutics.com. You may also read and copy any document we file 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.

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

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

1

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

SEC rules allow us to incorporate by reference into this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2008;

our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2009;

our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2009;

our definitive Proxy Statement on Schedule 14A for a Special Meeting of Shareholders, dated and filed with the SEC on January 14, 2009, as amended by Amendment No. 1 to the definitive Proxy Statement on Schedule 14A, dated as of February 4, 2009 and filed with the SEC on February 5, 2009 and Definitive Additional Materials filed with the SEC on January 26, 2009, February 27, 2009 and March 9, 2009;

our Soliciting Material on Schedule 14A for our 2009 Annual Meeting of Shareholders, dated and filed with the SEC on July 29, 2009, as amended by our Soliciting Material on Schedule 14A, dated and filed with the SEC on August 10, 2009;

our Current Reports on Form 8-K filed on January 6, 2009, January 8, 2009, January 29, 2009, February 9, 2009, February 23, 2009, March 6, 2009, March 16, 2009 (Items 1.01 and 2.01 only), March 27, 2009, April 13, 2009, April 14, 2009, April 17, 2009, May 12, 2009 (Item 1.01 only), May 15, 2009, May 20, 2009, May 28, 2009, May 29, 2009, June 10, 2009, June 26, 2009, July 7, 2009, July 28, 2009 and August 7, 2009; and

the description of our capital stock contained in our Registration Statement on Form 10 filed with the SEC on June 27, 1996, including any amendment or reports filed for the purpose of updating that description.

Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded.

You may request a copy of these filings, at not cost, by writing or telephoning us at the following address:

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

Attention: Investor Relations

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and any documents we incorporate by reference herein or therein may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act. All statements other than statements of historical fact are forward-looking statements for purposes of these provisions, including:

any projections of cash resources, revenues, operating expenses or other financial terms;

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

and 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;

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.

2

In some cases, forward-looking statements can be identified by terms such as anticipates, believes, continue, could, estimates, expects, n plans, potential, predicts, should or will or the negative thereof or other comparable terms. Such statements are based on management s cur expectations and are subject to risks and uncertainties which may cause actual results to differ materially from those set forth in the forward-looking statements. 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 described in the section of this prospectus entitled Risk Factors and in the documents incorporated herein by reference. 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, except to the extent required by law.

RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table sets forth our ratio of earnings to combined fixed charges and preferred stock dividends, for each of the periods indicated:

	Six m	onths					
	ended June 30,			Year ended December 31,			ι,
	2009	2008	2008	2007	2006	2005	2004
Ratio of earnings to combined fixed charges and preferred stock dividends (1)							

(1) Earnings were not sufficient to cover combined fixed charges and preferred stock dividends. 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 six months ended June 30, 2009 and 2008, and for the years ended December 31, 2008, 2007, 2006, 2005 and 2004, were insufficient to cover fixed charges, and fixed charges and preferred stock dividends, by \$40.6, \$113.9, \$202.9, \$148.3, \$135.8, \$102.5 and \$252.3 (in millions), respectively. For this reason, no ratios are provided for these periods.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of our securities for general corporate purposes, unless we state otherwise in a prospectus supplement. We may temporarily invest funds that we do not immediately use in short- and medium-term marketable securities.

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. 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, contractual restrictions and other factors that our board of directors may deem relevant.

LEGAL MATTERS

Certain legal matters in connection with the securities offered hereby will be passed upon for us by O Melveny & Myers 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, 2008, and for each of the three years in the period ended December 31, 2008, included in our Annual Report on Form 10-K for the year ended December 31, 2008, 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.

4