

CELL THERAPEUTICS INC
Form S-4
July 09, 2003
Table of Contents

As filed with the Securities and Exchange Commission on July 9, 2003

Registration No. •

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-4

REGISTRATION STATEMENT

Under

THE SECURITIES ACT OF 1933

CELL THERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

Washington
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial Classification
Code Number)

91-1533912
(I.R.S. Employer

Identification Number)

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

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

James A. Bianco, M.D.

President and Chief Executive Officer

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

(206) 282-7100

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

Copies to:

<p>Michael J. Kennedy, Esq.</p> <p>Wilson Sonsini Goodrich & Rosati, Professional Corporation</p> <p>One Market</p> <p>Spear Tower, Suite 3300</p> <p>San Francisco, California 94105</p> <p>United States of America</p> <p>(415) 947-2000</p>	<p>Filippo Troisi, Esq.</p> <p>Gianni, Origoni, Grippo & Partners, Studio Legale</p> <p>Via delle Quattro Fontane, 20</p> <p>00184 Rome, Italy</p> <p>(+39) 06-478-751</p>	<p>Kenton J. King, Esq.</p> <p>Celeste E. Greene, Esq.</p> <p>Skadden, Arps, Slate, Meagher & Flom LLP</p> <p>525 University Avenue, Suite 1100</p> <p>Palo Alto, California 94301</p> <p>United States of America</p> <p>(650) 470-4500</p>	<p>Manfredi Vianini Tolomei, Esq.</p> <p>Chiomenti Studio Legale</p> <p>Via A. Boito 8</p> <p>20121 Milan, Italy</p> <p>(+39) 02-72-1571</p>
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Approximate date of commencement of proposed sale to the public:

As soon as practicable after this registration statement becomes effective and upon completion of the merger of Novuspharma S.p.A., an Italian joint stock company, with and into the registrant as described in the agreement and plan of merger, dated as of June 16, 2003.

If the securities being registered on this Form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. "

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

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

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered(1)	Amount to be registered(2)	Proposed maximum aggregate offering price(3)	Amount of registration fee(4)
Common Stock, no par value per share	16,909,349	\$165,373,433	\$13,378.71

- (1) This registration statement relates to shares of the registrant's common stock issuable to holders of ordinary shares of Novuspharma S.p.A. pursuant to the agreement and plan of merger dated June 16, 2003.
- (2) Based upon the maximum number of shares of common stock of the registrant that may be required to be issued in connection with the transaction described herein, calculated as the product of 2.45, the number of shares of CTI common stock that will be exchanged for each outstanding Novuspharma ordinary share, and the sum of (x) the number of Novuspharma ordinary shares outstanding as of July 9, 2003 and (y) the number of Novuspharma ordinary shares underlying options outstanding as of July 9, 2003.
- (3) Estimated solely for the purpose of calculating the amount of the registration fee required by Section 6(b) of the Securities Act of 1933, as amended. Pursuant to Rule 457(f)(1) and (c) under the Securities Act of 1933, as amended, the proposed maximum aggregate offering price of the registrant's common stock was calculated based on the average of the high and low prices per share of CTI common stock as reported on the Nasdaq National Market on July 1, 2003 as follows: 16,909,349 shares, multiplied by the average price per share of \$9.78.
- (4) Calculated pursuant to Section 6(b)(2) of the Securities Act of 1933 at a rate of \$80.90 per million dollars of aggregate offering price.
- (5) This registration statement also relates to rights to purchase 1/100th share of Series C Convertible Preferred Stock, which are attached to all shares of the registrant's common stock pursuant to the registrant's Shareholder Rights Agreement dated November 11, 1996, as amended. Until the occurrence of events described in the Shareholder Rights Agreement, the rights are not exercisable, are evidenced by the common stock certificates and are transferred with and only with such common stock.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Securities Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

United States of America

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT!

Dear CTI Shareholders: • • , 2003

I am pleased to report that the board of directors of Cell Therapeutics, Inc. and the board of directors of Novuspharma S.p.A. have each unanimously approved the merger of Novuspharma with and into CTI. On • • , 2003 we will hold a special meeting of shareholders of CTI, where we will ask you to approve the stock-for-stock merger. It is a condition to the completion of the merger that this approval be obtained. **Please vote by following the instructions in the enclosed proxy statement/prospectus, even if you plan to attend the meeting.**

We currently market TRISENOX[®] for relapsed/refractory acute promyelocytic leukemia and are developing XYOTAX (CT-2103), which is in pivotal Phase III trials for lung and ovarian cancers. In June 2003, we received fast track designation from the FDA for our XYOTAX pivotal trials in poor performance status, or PS2, patients with advanced non-small cell lung cancer. Novuspharma, a Bresso (Milan), Italy-based public biopharmaceutical company, is developing Pixantrone, a potentially less cardiotoxic, more active anthracycline in Phase III clinical trials for lymphoma. We have focused on discovering and acquiring late stage development products and commercializing innovative new treatments for cancer. In contrast, Novuspharma's expertise has focused primarily on predevelopment activities and early Phase I/II clinical development. We believe the strength of our combined product pipelines, potential cost savings and operating synergies, and the strong combined balance sheet of CTI and Novuspharma make this a smart strategic and financial transaction.

If our shareholders approve the merger and the other conditions to the merger are met, we will issue 2.45 shares of CTI common stock in exchange for each outstanding Novuspharma ordinary share, resulting in an expected issuance of approximately 16.0 million shares of CTI common stock based on the number of Novuspharma ordinary shares outstanding as of June 16, 2003. In addition, outstanding Novuspharma stock options will be accelerated and cancelled, and CTI will grant Novuspharma employees new options to purchase CTI common stock. Our European headquarters will relocate to Novuspharma's offices in Bresso (Milan) Italy, and Novuspharma will operate as an Italian branch, and later as an Italian subsidiary, of CTI. At the completion of the merger, CTI's bylaws will be amended to increase the size of the CTI board from nine to twelve. We will appoint Novuspharma nominees to two of the twelve board seats, and a third independent nominee will be identified by Novuspharma and mutually agreed upon by CTI and Novuspharma to fill the remaining board seat.

After careful review and consideration, the CTI board of directors has unanimously approved the merger agreement and the related transactions. **Your board of directors recommends that you vote FOR the merger proposal.**

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On • •, 2003, the last trading day before the date of the accompanying proxy statement/prospectus, CTI common stock, which trades on the Nasdaq National Market under the symbol CTIC, closed at \$•. We will apply to also list our common stock on Italy's Nuovo Mercato stock exchange under the symbol CTIC commencing upon the completion of the proposed merger.

Table of Contents

Your vote is important. We cannot merge Novuspharma with and into CTI unless the holders of a majority of the shares voting at the CTI special meeting vote to approve the merger. Whether or not you plan to attend the special meeting, please vote by following the instructions in the enclosed proxy statement/prospectus to ensure that your shares will be represented at the special meeting. If you attend the special meeting and wish to vote in person, you may withdraw your proxy and do so.

You can find additional information about the proposed merger in the enclosed proxy statement/prospectus. Please consider the matters discussed under Risk Factors commencing on page 23 before voting. We encourage all shareholders to read this entire document carefully.

By Order of the Board of Directors,

James A. Bianco, M.D.

President and Chief Executive Officer

PLEASE VOTE YOUR PROXY TODAY

Neither the United States Securities and Exchange Commission nor any state securities commission nor the Republic of Italy Commissione Nazionale per le Società e la Borsa has approved or disapproved these securities, passed upon the fairness or merits of the merger of Novuspharma with and into CTI or determined if this proxy statement/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This proxy statement/prospectus is dated • •, 2003, and is being first mailed to CTI shareholders on or about • •, 2003.

Table of Contents

CELL THERAPEUTICS, INC.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

United States of America

NOTICE OF SPECIAL MEETING OF SHAREHOLDERS

To be held on • •, 2003 at • a.m. Seattle time

To the Shareholders of Cell Therapeutics, Inc.:

We will hold a special meeting of shareholders of Cell Therapeutics, Inc. on • •, 2003 at • a.m., local time, at •, Seattle, Washington, United States of America for the purposes of considering and acting on the following matters:

1. a proposal to approve the merger between Cell Therapeutics, Inc. and Novuspharma S.p.A. and the transactions contemplated thereby as set forth in the merger agreement dated as of June 16, 2003 between CTI and Novuspharma; and
2. to transact any other business that may properly come before the special meeting or any adjournment or postponement of the special meeting.

The foregoing items of business are more fully described in the accompanying proxy statement/ prospectus, which we encourage you to read carefully. The approval of the merger proposal requires the affirmative vote of a majority of the votes cast at the CTI special meeting. **The CTI board of directors has unanimously approved the merger agreement and recommends that you vote FOR the merger proposal.**

Only those shareholders whose names appear on our records as owning shares of our common stock at the close of business on • •, 2003, are entitled to notice of, and to vote at, the special meeting and any adjournment or postponement of the special meeting.

Your vote is very important, regardless of the number of shares you own. Please vote as soon as possible to make sure that your shares are represented at the meeting. To vote your shares, you may either vote by mail by completing and returning the enclosed proxy card or, if you are a holder of record of CTI common shares, you may vote by telephone or the Internet by following the instructions on the enclosed proxy card. If you are a holder of record of CTI common stock, you may also cast your vote in person at the special meeting. If your shares are held in an account at a brokerage firm or bank, you must instruct them on how to vote your shares. Executed proxies with no instructions indicated will be voted FOR the merger proposal.

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By Order of the Board of Directors,

James A. Bianco, M.D.

President and Chief Executive Officer

Cell Therapeutics, Inc.

Seattle, Washington

United States of America

••, 2003

Table of Contents

PROXY STATEMENT/PROSPECTUS

We are furnishing this document, as a proxy statement, to holders of our common stock in connection with the solicitation of proxies by our board of directors for use at a special meeting of our shareholders. As a proxy statement, this document provides information to our shareholders for their consideration regarding the proposal to be presented at our special meeting of shareholders to approve the merger between CTI and Novuspharma S.p.A. as set forth in the agreement and plan of merger between CTI and Novuspharma dated as of June 16, 2003, which we call the merger agreement. Pursuant to the merger agreement, Novuspharma will merge with and into CTI. If the merger is approved by our shareholders and all other conditions to the completion of the merger are satisfied or waived, based on the number of Novuspharma ordinary shares outstanding as of June 16, 2003, we will issue approximately 16.0 million shares of CTI common stock in exchange for the cancelled ordinary shares of Novuspharma pursuant to an exchange ratio of 2.45 shares of CTI common stock for each Novuspharma ordinary share. Upon completion of the merger, based on the number of Novuspharma ordinary shares outstanding as of June 16, 2003, current CTI shareholders will own approximately 67.7% of the outstanding common stock of CTI and current Novuspharma shareholders will own approximately 32.3% of the outstanding CTI common stock. We will also issue options to purchase shares of CTI common stock to Novuspharma employees, to be determined in our discretion.

One condition to closing is that the shareholders of Novuspharma must also approve the merger at a special meeting of Novuspharma shareholders, which will be held at approximately the same time as our special meeting. The Novuspharma board of directors approved the merger and is informing Novuspharma shareholders of the terms of the proposed transaction by means of a separate document, the *Documento Informativo*, under Italian law.

Once the merger is completed, we will deliver this document, as a prospectus, to Novuspharma shareholders either before or at the same time that our exchange agent delivers newly-issued CTI common shares in exchange for the cancelled Novuspharma ordinary shares. As a prospectus, this document provides information relevant to the Novuspharma shareholders' investment decision to accept shares of our common stock in exchange for Novuspharma ordinary shares. It describes, among other things, each of the parties to the merger and the surviving company and explains the significant respects in which share ownership in the surviving company will differ from share ownership in Novuspharma.

**See Risk Factors beginning on page 23 for a discussion of important factors
that you should consider in determining how to vote on the merger.**

On • •, 2003, the last trading day before the date of this proxy statement/prospectus, the closing sales price of our common stock, which trades on the Nasdaq National Market under the symbol CTIC, was \$•. We will apply to also list our common stock on Italy's Nuovo Mercato stock exchange under the symbol CTIC commencing upon the completion of the proposed merger.

Neither the United States Securities and Exchange Commission nor any state securities commission nor the Republic of Italy Commissione Nazionale per le Società e la Borsa has approved or disapproved these securities, passed upon the fairness or merits of the merger of Novuspharma with and into CTI, or determined if this proxy statement/prospectus is truthful or complete. Any

representation to the contrary is a criminal offense.

The date of this proxy statement/prospectus is • •, 2003.

Table of Contents

CELL THERAPEUTICS, INC.

PROXY STATEMENT/PROSPECTUS

TABLE OF CONTENTS

	Page

<u>ADDITIONAL INFORMATION</u>	iv
<u>QUESTIONS AND ANSWERS ABOUT THE PROPOSAL</u>	Q-1
<u>SUMMARY</u>	1
<u>The Merger</u>	1
<u>The Companies</u>	1
<u>Votes Required for Approval of the Merger</u>	4
<u>Recommendation of the CTI Board of Directors</u>	6
<u>Opinion of CTI's Financial Advisor</u>	6
<u>Interests of Certain Persons in the Merger</u>	7
<u>What CTI Shareholders Will Receive in the Merger</u>	7
<u>What Novuspharma Shareholders Will Receive in the Merger</u>	7
<u>Ownership of the Combined Company Following the Merger</u>	7
<u>Board of Directors Following the Merger</u>	8
<u>Treatment of Novuspharma Options</u>	8
<u>Accounting Treatment of the Merger</u>	8
<u>Rescission Rights; Dissenters' Rights</u>	8
<u>Regulatory Matters</u>	9
<u>Material U.S. Federal Tax Considerations</u>	9
<u>Italian Tax Considerations</u>	9
<u>Material Terms of the Merger Agreement</u>	10
<u>Comparison of Rights of CTI Shareholders and Novuspharma Shareholders</u>	13
<u>Comparative Stock Prices and Dividends</u>	13
<u>Comparative Historical and Pro Forma Combined Per Share Data</u>	14
<u>Selected CTI Historical Consolidated Financial Data</u>	15
<u>Selected Novuspharma Historical Consolidated Financial Data</u>	18
<u>Selected Unaudited Pro Forma Combined Financial Data of CTI and Novuspharma</u>	20
<u>RISK FACTORS</u>	23
<u>Risks Related to the Merger</u>	23
<u>Risks Related to International Expansion</u>	27
<u>Risks Related to the Business of Our Combined Company</u>	28
<u>Risks Related to the Securities Markets</u>	39
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	41
<u>THE SPECIAL MEETING OF CTI SHAREHOLDERS</u>	43
<u>Date, Time and Place of the Special Meeting</u>	43
<u>Purpose of the Special Meeting</u>	43
<u>Record Date and Shares Outstanding</u>	43
<u>Quorum</u>	43
<u>Abstentions and Broker Non-Votes</u>	44
<u>Vote Required</u>	44
<u>Voting Agreements and Shares Controlled by Management</u>	44

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<u>Voting of Proxies</u>	45
<u>Revocability of Proxies</u>	46
<u>Solicitation of Proxies</u>	46
<u>Novuspharma Special Meeting: Vote Required; Posting of Shareholder Approval; Voting Agreements</u>	46

Table of Contents

	<u>Page</u>
<u>THE MERGER</u>	48
<u>General</u>	48
<u>Background of the Merger</u>	48
<u>CTI's Reasons for the Merger; Recommendation of the CTI Board of Directors</u>	53
<u>Novuspharma's Reasons for the Merger; Recommendation of the Novuspharma Board of Directors</u>	56
<u>Opinion of CTI's Financial Advisor</u>	58
<u>Summary of Material Terms of Voting Agreements</u>	65
<u>Interests of Certain Persons in the Merger</u>	68
<u>Accounting Treatment</u>	69
<u>Regulatory Matters</u>	70
<u>Rescission Rights; Dissenters' Rights</u>	71
<u>Listing on Nuovo Mercato</u>	71
<u>U.S. Federal Securities Law Consequences; Resale Restrictions</u>	71
<u>Summary of Material Provisions of Shareholders Agreements</u>	72
<u>Material U.S. Federal Income Tax Considerations</u>	74
<u>Material Italian Tax Considerations</u>	76
<u>THE MERGER AGREEMENT</u>	79
<u>Structure of the Merger</u>	79
<u>Effective Time of the Merger</u>	79
<u>Conversion of Novuspharma Shares in the Merger</u>	79
<u>Treatment of Novuspharma Options in the Merger</u>	79
<u>Rescission Shares</u>	80
<u>Exchange Procedures</u>	80
<u>Corporate Organization and Governance</u>	80
<u>CTI's Shareholder Meeting and Novuspharma's Shareholder Meeting</u>	81
<u>Representations and Warranties</u>	81
<u>Novuspharma's Covenants Relating to Conduct of Business</u>	84
<u>CTI's Covenants Relating to Conduct of Business</u>	86
<u>Mutual Covenants Relating to Conduct of Business</u>	88
<u>No Solicitation of Transactions</u>	88
<u>Indemnification and Insurance</u>	91
<u>European Headquarters</u>	91
<u>Tax Ruling</u>	91
<u>Conditions</u>	91
<u>Termination</u>	93
<u>Termination Fee</u>	94
<u>Expenses</u>	96
<u>Amendment; Extension and Waiver</u>	96
<u>COMPARATIVE STOCK PRICES AND DIVIDENDS</u>	97
<u>CTI</u>	97
<u>Novuspharma</u>	97
<u>Additional Comparative Information</u>	98
<u>MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS OF NOVUSPHARMA</u>	99
<u>BUSINESS OF NOVUSPHARMA</u>	112
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT OF NOVUSPHARMA</u>	124
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT OF CTI</u>	125

Table of Contents

	<u>Page</u>
<u>CONDITIONS IN ITALY AND THE EUROPEAN UNION</u>	127
<u>Exchange Rates: European Economic and Monetary Union</u>	127
<u>Exchange Controls</u>	128
<u>Regulatory Framework</u>	128
<u>Governmental Support of Medical Research and Training</u>	130
<u>UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS OF CTI AND NOVUSPHARMA</u>	131
<u>MANAGEMENT OF OUR COMBINED COMPANY AFTER THE MERGER</u>	140
<u>Board of Directors</u>	140
<u>Executive Officers</u>	140
<u>Business Experience</u>	140
<u>Bylaw Amendment and Merger Agreement Provisions Affecting Board Composition</u>	143
<u>Compensation of Directors</u>	143
<u>Employment Arrangements</u>	143
<u>Certain Relationships and Related Party Transactions</u>	147
<u>COMPARISON OF RIGHTS OF CTI SHAREHOLDERS AND NOVUSPHARMA SHAREHOLDERS</u>	149
<u>Capitalization</u>	149
<u>Number, Election, Vacancy and Removal of Directors</u>	150
<u>Amendments to Charter Documents</u>	151
<u>Amendments to Bylaws</u>	151
<u>Action by Written Consent</u>	152
<u>Notice of Shareholder Actions</u>	152
<u>Special Shareholder Meetings</u>	153
<u>Shareholder Inspection Rights; Shareholder Lists</u>	153
<u>Limitation of Personal Liability and Indemnification of Directors and Officers</u>	153
<u>Dividends</u>	154
<u>Conversion</u>	155
<u>Rights Plan</u>	155
<u>Voting Rights; Required Vote for Authorization of Certain Actions</u>	156
<u>OTHER PROPOSALS</u>	157
<u>LEGAL MATTERS</u>	157
<u>EXPERTS</u>	157
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	158
<u>INCORPORATION OF DOCUMENTS BY REFERENCE</u>	158
INDEX TO NOVUSPHARMA FINANCIAL STATEMENTS	FIN-1
APPENDICES:	
Appendix A Agreement and Plan of Merger between CTI and Novuspharma	A-1
Appendix B Form of CTI Shareholder Voting Agreement for Directors and Executive Officers	B-1
Appendix C CTI Shareholder Voting Agreement between Essex Woodlands Health Ventures Fund IV, LP and Novuspharma	C-1
Appendix D Form of Novuspharma Shareholder Voting Agreement for Directors and Officers	D-1
Appendix E Form of Novuspharma Shareholder Voting Agreement for Shareholders	E-1
Appendix F Form of Shareholder Agreement	F-1
Appendix G Opinion of CIBC World Markets Corp.	G-1
Appendix H Amended and Restated Bylaws of CTI	H-1

Table of Contents

ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates important business and financial information about Cell Therapeutics, Inc. from documents we have filed with the Securities and Exchange Commission that are not included in or delivered with this proxy statement/prospectus. If you call or write, we will send you copies of these documents, including any exhibits specifically incorporated by reference in the documents, without charge. You may contact us at:

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

United States of America

Attention: Investor Relations

Telephone Number: (206) 272-4345

In order to receive timely delivery of the documents in advance of the special meeting, you must make your request no later than • •, 2003.

For more information on the material incorporated by reference in this proxy statement/prospectus, see [Where You Can Find More Information](#).

All references to dollars or \$ in this proxy statement/prospectus are references to United States dollars; all references to euros or are references to European Union, or EU, euros and all references to lira or Lit. are to the Italian lira. In 2003, the median 4 p.m. Greenwich Mean Time spot rate for the euro expressed in U.S. dollars per euro was \$• to 1.00. The exchange rate between the lira and the euro established pursuant to the Maastricht treaty is fixed at Lit. 1,936.27 to 1.00. Since January 1, 2002, the lira has been withdrawn from circulation. See [Conditions in Italy and the European Union Exchange Rates](#); [European Economic and Monetary Union](#).

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE PROPOSAL

Q: What is the proposed transaction?

A: We are proposing to merge Novuspharma S.p.A., an Italian joint stock company (similar to a corporation), with and into CTI. CTI will be the surviving corporation, and as a result:

CTI will acquire all of Novuspharma's assets and rights;

CTI will assume all of Novuspharma's liabilities and obligations;

each of Novuspharma's outstanding ordinary shares will convert into 2.45 shares of CTI common stock; and

Novuspharma's separate legal existence will cease.

Q: What am I being asked to vote on?

A: You are being asked to vote on a proposal to approve the merger and the transactions contemplated thereby, which we refer to in this proxy statement/prospectus as the merger proposal. It is a condition to the completion of the merger that the merger proposal be approved by our shareholders.

Q: How does the CTI board of directors recommend that I vote?

A: The CTI board of directors recommends that you vote **FOR** the merger proposal.

Q: Are there any risks related to the proposed transaction or any risks related to owning CTI common stock?

A: Yes. You should carefully review the risk factors described beginning on page 23.

Q: When and where is the CTI special meeting?

A: The special meeting of CTI shareholders will be held at • a.m., local time, on, • •, 2003, at •, Seattle, Washington, United States of America.

Q: Will I receive new stock certificates?

A: No. If the merger is approved, your existing CTI stock certificates will not be replaced. Please do not send any stock certificates with your proxy card.

Q: What do I need to do now?

A: After you have carefully read this proxy statement/prospectus, please vote by either completing, signing and dating the enclosed proxy card and mailing it in the enclosed prepaid return envelope or, if you are a holder of record of CTI common shares, voting by telephone or electronically over the Internet by following the instructions on the enclosed proxy card as soon as possible, so that your shares of CTI common stock may be represented and voted at the special meeting of CTI's shareholders. If you attend the special meeting, you may vote in person even though you have submitted your proxy card.

If you hold your shares of CTI common stock through a broker, you may also have the option to vote those shares by telephone or over the Internet. Please refer to the separate instructions provided by your broker.

Q-1

Table of Contents

Q: If my shares of CTI common stock are held in street name by my broker, will my broker automatically vote my shares of CTI common stock for me?

A: No. Your broker is not permitted to vote your shares of CTI common stock on the merger proposal without specific instructions from you. Unless you follow the directions your broker provides you regarding how to instruct your broker to vote your shares of CTI common stock, your shares will not be voted.

Q: What should I do if I receive more than one set of voting materials?

A: You may receive more than one set of voting materials, including multiple copies of this proxy statement/prospectus and multiple proxy cards or voting instruction cards. For example, if you hold your shares of CTI common stock in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares. If you are a shareholder of record and your shares of CTI common stock are registered in more than one name, you will receive more than one proxy card. Please either complete, sign, date and return, or follow the instructions for voting by telephone or over the Internet provided on, each proxy card and voting instruction card that you receive.

Q: Can I change my vote after I have mailed my proxy card?

A: Yes. You may change your vote at any time before the special meeting by:

 sending written notice to:

Cell Therapeutics, Inc.
501 Elliott Avenue West, Suite 400
Seattle, Washington 98119
United States of America
Attention: Secretary;

 returning a later-dated proxy card;

 changing your vote by telephone or electronically over the Internet; or

 voting in person at the special meeting.

If you hold your shares through a broker and wish to change your vote, you must contact your broker.

Q: When do you expect to complete the merger?

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A: We are working toward completing the merger as quickly as practicable. After the special meeting of CTI shareholders and the special meeting of Novuspharma shareholders are held, assuming that the shareholders of CTI and Novuspharma vote to approve the merger, we will need to, among other things, provide notice and make filings with various regulatory authorities. These filings include, among others, applying to have our common stock listed on the Nuovo Mercato stock exchange in Italy which is managed by the Borsa Italiana S.p.A. We anticipate that completing all such notifications and filings and receiving the requisite governmental approvals will require three to four months from the date of this proxy statement/prospectus.

Q: Will the merger be taxable to me?

A: CTI shareholders who are not also Novuspharma shareholders generally will not recognize gain or loss for U.S. federal income tax purposes in connection with the merger. We anticipate that the merger will constitute a tax-free reorganization for U.S. federal income tax purposes and a tax

Q-2

Table of Contents

neutral transaction for Italian income tax purposes. Those Novuspharma shareholders who are Italian residents for Italian tax purposes are not expected to recognize any gain or loss in connection with the merger. However, Novuspharma shareholders who are not Italian residents and certain U.S. holders of Novuspharma stock may be subject to taxation in connection with the merger. Neither CTI nor Novuspharma will be obligated to complete the merger unless CTI and Novuspharma each receive a tax opinion from their respective Italian tax counsel with respect to the tax treatment of the merger. See The Merger Material U.S. Federal Income Tax Considerations and The Merger Material Italian Tax Considerations.

Q: Where can I find more information about the companies?

A: Information about the business and management of both CTI and Novuspharma is contained in this proxy statement/prospectus. See, Management of Our Combined Company After the Merger and Where You Can Find More Information.

Q: Who can answer my questions?

A: If you have questions, or want additional copies of this proxy statement/prospectus, please contact our proxy solicitor, Innisfree M&A Incorporated, by calling its toll-free number: (800) •. You may also contact us directly at:

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

United States of America

Attention: Investor Relations

Telephone Number: (206) 272-4345

Q-3

Table of Contents

SUMMARY

This summary, together with the preceding Questions and Answers section, highlights information more fully described elsewhere in this proxy statement/prospectus. You should read this entire document and the other documents we refer to for a more complete understanding of the proposed merger and the related transactions. In particular, you should read the documents attached to this proxy statement/prospectus, which include the merger agreement. Except where the context otherwise requires, references in this proxy statement/prospectus to we, our, us and CTI are to Cell Therapeutics, Inc. and references to Novuspharma are to Novuspharma S.p.

The Merger

We have entered into a merger agreement with Novuspharma that provides for the merger of Novuspharma with and into CTI. We will be the surviving corporation. At the completion of the merger each Novuspharma ordinary share will be exchanged for 2.45 shares of CTI common stock. We urge you to read carefully the entire merger agreement, a copy of which is attached as *Appendix A* to this proxy statement/prospectus. See The Merger Agreement.

The Companies

CTI

Cell Therapeutics, Inc.

501 Elliott Avenue West, Suite 400

Seattle, Washington 98119

United States of America

Telephone: (206) 282-7100

We develop, acquire and commercialize novel treatments for cancer. Our goal is to build a leading, vertically-integrated biopharmaceutical company with a diversified portfolio of proprietary oncology drugs. Our research, clinical development and in-licensing activities are concentrated on identifying new, less toxic and more effective ways to treat cancer. We market TRISENOX[®] for the treatment of acute promyelocytic leukemia, or APL, in the U.S. and in the EU. XYOTAX, our lead drug candidate, is currently in three pivotal Phase III trials for the treatment of non-small cell lung cancer and we anticipate one pivotal Phase III trial for ovarian cancer to begin in late 2003.

Our Products

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We commenced sales for TRISENOX (arsenic trioxide) in October 2000 and currently market TRISENOX in the U.S. and in the EU. For the twelve month period ended March 31, 2003 we recorded \$14.2 million in TRISENOX net sales, an increase of 111% over the prior twelve month period. TRISENOX is approved for patients with a type of blood cell cancer called APL who have relapsed or failed standard therapies. In a pivotal trial in patients with relapsed or refractory APL, 70% of the 40 patients experienced complete remission following treatment with TRISENOX with 82% achieving a molecular remission. We have received orphan drug status for TRISENOX from the Food and Drug Administration, or FDA, for APL, and orphan designation for multiple myeloma,

Table of Contents

myelodysplastic syndrome, or MDS, chronic myeloid leukemia, or CML, and acute myeloid leukemia, or AML. TRISENOX has also received orphan medicinal product status from the European Agency for the Evaluation of Medicinal Products, or EMEA, for APL, and designation for MDS and multiple myeloma. We believe that most TRISENOX sales result from treatment of MDS and multiple myeloma and we have multiple completed and ongoing clinical trials addressing these cancers. We believe that final data from several of these studies may provide a basis for a regulatory application to the FDA and the EMEA to extend the label indication to include MDS.

In 1998, we licensed exclusive worldwide rights to paclitaxel linked to polyglutamate, branded as XYOTAX, and to all potential uses of the polyglutamate polymer technology used to create XYOTAX. Based on data from our ongoing clinical trials and experience in over 450 patients, we believe that XYOTAX may have less severe side effects, be better tolerated and have superior anti-tumor activity than paclitaxel or docetaxel. Based on encouraging interim Phase II clinical data, we have initiated pivotal trial programs in lung cancer and anticipate initiating a pivotal trial in ovarian cancer in late 2003.

In the fourth quarter of 2002, we initiated three pivotal XYOTAX Phase III clinical trials. These include one Phase III trial for the second-line treatment of non-small cell lung cancer, and two Phase III trials of XYOTAX in the front-line treatment of poor performance status, or PS2, patients with non-small cell lung cancer. We have followed the recent guidelines of the FDA for special protocol assessment on all of our ongoing pivotal trials and based on correspondence with the FDA we believe that a positive outcome in a pivotal trial will lead to approval in that indication. We currently anticipate completing one or more of the XYOTAX trials in lung cancer and being in a position to file our first New Drug Application for XYOTAX in late 2004. We have received fast track designation from the FDA for our pivotal trials in PS2 patients with advanced non-small cell lung cancer as a result of the potential of XYOTAX to demonstrate improvement over available therapy in these patients based on anti-tumor activity observed in Phase I and Phase II clinical trials. In addition, the Gynecologic Oncology Group, or GOG, has agreed to conduct a Phase III trial of XYOTAX in front-line treatment of ovarian cancer which they expect to begin in late 2003.

We are also developing a novel polyglutamate-camptothecin molecule, CT-2106. We initiated a Phase I clinical study in the second quarter of 2002. CT-2106 has been administered to a total of 13 patients with a variety of advanced stage cancers without dose-limiting toxicities being reported to date. Based on this interim Phase I clinical trial safety and pharmacokinetic data we are advancing the clinical development of CT-2106. In early 2004, we anticipate initiating Phase I and II studies of CT-2106 in combination with standard chemotherapy in colorectal cancer and as a single agent in small cell lung cancer.

Recent Events

In June 2003, we received fast track designation from the FDA for our XYOTAX pivotal trials in PS2 patients with advanced non-small cell lung cancer. Fast track designation is granted to expedite the review process of applications for approval of new drugs intended for treatment of serious or life threatening conditions where potential to address an unmet medical need is demonstrated. XYOTAX was granted fast track designation by the FDA as a result of the incurable nature of non-small cell lung cancer in PS2 patients and the potential of XYOTAX to exhibit improvement over available therapy based on anticancer activity in Phase I and Phase II clinical trials.

Table of Contents

In June 2003, we issued \$75 million principal amount of 4% convertible senior subordinated notes due July 1, 2010 to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended. The notes bear interest at a rate of 4% per annum and are convertible into shares of CTI common stock at the rate of 74.0741 shares per \$1,000 principal amount of notes, which is equivalent to an initial conversion price of approximately \$13.50 per share. The notes are subordinated to all present and future senior debt of CTI. We have granted the initial purchasers of the notes an option to purchase up to an additional \$15 million in principal amount of notes to cover over-allotments.

Our Strategy

Our goal is to become a leading cancer drug company. The following are the key elements of our business strategy:

we initially develop our cancer drug candidates to treat life-threatening types or stages of cancer for which current treatments are inadequate, and that qualify for fast-track designation from the FDA and EMEA. We will also seek to expand the market potential of our products by seeking further approval for other indications in larger cancer patient populations;

we plan to devote a substantial portion of our efforts to develop XYOTAX and to further develop and commercialize TRISENOX for additional indications;

we have developed our own sales and marketing capabilities in the United States and select European territories and may establish collaborations to commercialize our products;

we are applying our patented polymer drug delivery technology to develop a portfolio of improved versions of currently marketed anticancer drugs and novel cancer fighting agents to improve their ease of administration, side effect profile and effectiveness; and

we plan to continue to in-license or acquire complementary products, technologies, or companies.

Other Information

We were incorporated in Washington in 1991. Our principal office is located at 501 Elliott Avenue West, Suite 400, Seattle, WA 98119. Our telephone number is (206) 282-7100. Our world wide web address is <http://www.cticseattle.com>. Information on our web site does not constitute part of this proxy statement/prospectus. CTI, TRISENOX and XYOTAX (formerly referred to as PG-TXL) are our proprietary marks. All other product names, trademarks and trade names referred to in this proxy statement/prospectus are the property of their respective owners.

Novuspharma

Novuspharma S.p.A.

Via Ariosto 23

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20091 Bresso (Milan), Italy

Telephone: +39 (02) 610 351

Novuspharma is an Italian biopharmaceutical company with a development strategy focused on the treatment of cancer, both by modifying existing chemotherapies to make them more effective and less toxic and by developing completely novel therapeutics for treatment of the disease. Novuspharma,

Table of Contents

with headquarters and a research facility in Bresso (Milan), Italy, began operations in 1999 following the spin-off of the oncology research and development department of Boehringer Mannheim Italia S.p.A. from F. Hoffman-La Roche Ltd. In November 2000, Novuspharma ordinary shares were listed on the Nuovo Mercato stock exchange in Italy. Novuspharma received proceeds from its initial public offering of 164 million before deducting related expenses.

Novuspharma's pipeline includes one investigational medicinal product currently in Phase III and Phase II clinical trials and another two products in Phase II clinical trials. As of July 8, 2003, Novuspharma has three investigational advanced stage cytotoxics specifically, in the DNA intercalator family of molecules in clinical development:

Pixantrone, also known as BBR 2778, is in Phase III clinical trials in indolent non-Hodgkin's lymphoma, or NHL, Phase II clinical trials in aggressive NHL and is expected to enter clinical trials in multiple sclerosis, or MS, during the second half of 2003;

BBR 3576 is in Phase II clinical trials in hormone refractory prostate cancer, or HRPC; and

BBR 3438 is in Phase II clinical trials in ovarian cancer.

In addition to the advanced stage cytotoxics, Pixantrone and BBR 3576, Novuspharma is also using its experience in cancer to build an early stage pipeline of antibodies and small molecules designed to attack tumors through novel mechanisms of action:

MT201 is in Phase I clinical trials, in collaboration with Micromet AG;

platinum compounds are in late pre-clinical development;

cancer therapies based on proteasome inhibition, which we refer to in this proxy statement/prospectus as proteasome inhibitors, are believed to be approximately two years from Phase I clinical trials, in collaboration with Cephalon, Inc.; and

inhibitors to HIF-1, which we refer to in this proxy statement/prospectus as HIF-1 inhibitors, are believed to be approximately three years from Phase I clinical trials, in collaboration with the National Cancer Institute.

See Business of Novuspharma.

Votes Required for Approval of the Merger

CTI

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We will hold a special meeting of our shareholders to consider a proposal to approve the merger and the transactions contemplated thereby. In order for us to complete the proposed merger, a majority of the shares of CTI common stock voting at the CTI special meeting must be voted in favor of the merger proposal.

The special meeting of our shareholders will be held at ●, Seattle, Washington, United States of America on ● ●, 2003, at ● a.m., local time. Shareholders listed in our books as the owners of our common stock at the close of business on the record date, ● ●, 2003, are entitled to vote at the special meeting.

Our directors and executive officers, owning collectively approximately 2.2% of the shares of our common stock outstanding as of June 16, 2003 and entitled to vote at the meeting, have entered into

Table of Contents

voting agreements with Novuspharma that commit them, subject to specified exceptions, not to sell any of their shares of CTI common stock prior to the CTI shareholder approval of the merger and to vote all of their shares of CTI common stock in favor of the merger proposal. Essex Woodlands Health Ventures Fund IV, L.P., one of our shareholders owning approximately 6.1% of the shares of our common stock outstanding as of June 16, 2003 and entitled to vote at the meeting, has entered into a voting agreement with Novuspharma that commits Essex Woodlands, subject to specified exceptions, not to sell more than 25% of its shares of CTI common stock prior to the earlier of the CTI shareholder approval of the merger and December 31, 2003, and to vote all of its shares of CTI common stock in favor of the merger proposal. Accordingly, if the parties to these voting agreements vote in accordance with the terms of the voting agreements, and assuming the parties to the voting agreements do not sell any of their shares of CTI common stock, the vote of approximately 13,869,851 additional shares of our common stock (or approximately 41.7% of the outstanding shares of our common stock as of June 16, 2003) will be required to approve the merger proposal, assuming that 100% of the shares of CTI common stock are represented at the special meeting. See [The Special Meeting of CTI Shareholders Voting Agreements and Shares Controlled by Management](#) and [The Merger Summary of Material Terms of Voting Agreements](#).

Novuspharma

Novuspharma will hold a special meeting of its shareholders to consider approval of the merger. The special meeting of Novuspharma shareholders will be held at Novuspharma's offices in Bresso (Milan), Italy, at the first call on • •, 2003, at • p.m., local time, at the second call on • •, 2003, at • p.m., local time and at the third call on • •, 2003, at • p.m., local time. In order for Novuspharma to complete the merger, two-thirds of the Novuspharma ordinary shares present (or represented by proxy) at the Novuspharma special meeting must be voted in favor of the merger, provided that the required quorum is satisfied.

Novuspharma will announce its special meeting by publishing a notice in the Official Gazette of the Italian Republic and in at least one national Italian newspaper. This notice may indicate three different dates on which the special meeting may be validly held (i.e., the first, second and third calls). In the event that Novuspharma's special meeting cannot be validly held at the first call (because, for example, an insufficient number of shares are represented at the meeting), the meeting may be held at the second call, at the relevant date and time indicated in the notice. In the event that the special meeting cannot be validly held at the second call, the special meeting may be held at the third call, at the relevant date and time indicated in the notice. With regard to the quorum required, if the special meeting is held at the first call, more than a majority of the outstanding Novuspharma ordinary shares must be represented; if the special meeting is held at the second call, more than one-third of the outstanding Novuspharma ordinary shares must be represented; and if the special meeting is held at the third call, more than one-fifth of the outstanding Novuspharma ordinary shares must be represented.

Directors and executive officers of Novuspharma, owning collectively approximately 13.0% of the Novuspharma ordinary shares outstanding as of June 16, 2003 and entitled to vote at the special meeting of Novuspharma shareholders, have entered into voting agreements with us that commit them, subject to specified exceptions, not to sell any of their Novuspharma ordinary shares prior to the Novuspharma shareholder approval or any postponement thereof and to vote all of their Novuspharma ordinary shares in favor of the merger. 3i Group plc, HBM Bio Ventures (Cayman) Ltd. and

Table of Contents

Novuspharma Invest NV, three of Novuspharma's shareholders owning collectively approximately 47% of the Novuspharma ordinary shares outstanding as of June 16, 2003 and entitled to vote at the special meeting of Novuspharma shareholders, have entered into voting agreements with us that commit those shareholders, subject to specified exceptions, not to sell their Novuspharma ordinary shares prior to the earlier of the Novuspharma shareholder approval of the merger and December 31, 2003 and to vote all of their Novuspharma ordinary shares in favor of the merger. Accordingly, if all of the parties to these voting agreements vote in favor of the merger, and assuming the parties to these voting agreements do not sell any of their Novuspharma ordinary shares, the vote of approximately 450,000 additional Novuspharma ordinary shares (or 7% of the Novuspharma ordinary shares outstanding as of June 16, 2003 and entitled to vote) will be required to approve the merger, assuming that 100% of the Novuspharma ordinary shares are represented at the special meeting. See *The Special Meeting of CTI Shareholders*, *Novuspharma Special Meeting; Vote Required; Posting of Shareholder Approval; Voting Agreements* and *The Merger Summary of Material Terms of Voting Agreements*.

Recommendation of the CTI Board of Directors

After careful consideration, the CTI board of directors unanimously:

determined that the merger and the merger agreement (including the merger plan (*progetto di fusione*) in the form attached to the merger agreement), are advisable and fair to and in the best interests of CTI and our shareholders; and

approved the merger, the merger plan, the merger agreement and the transactions contemplated by the merger agreement; and

recommends that you vote FOR the proposal to approve the merger and the transactions contemplated thereby.

In reaching its conclusion that the merger is advisable and fair to and in the best interests of CTI and our shareholders, and in deciding to approve the merger agreement, the CTI board of directors considered a number of factors, both positive and negative, as more fully described in *The Merger*, *CTI's Reasons for the Merger; Recommendation of the CTI board of directors*.

Opinion of CTI's Financial Advisor

In connection with the merger, the CTI board of directors received a written opinion of CIBC World Markets Corp. as to the fairness, from a financial point of view, to CTI of the exchange ratio. The full text of CIBC World Markets' written opinion, dated June 16, 2003, is attached to this proxy statement/prospectus as *Appendix G*. We encourage you to read this opinion carefully in its entirety for a description of the assumptions made, procedures followed, matters considered and limitations on the review undertaken. **CIBC World Markets' opinion was provided to the CTI board of directors in its evaluation of the exchange ratio, does not address any other aspect of the merger and does not constitute a recommendation to any shareholder as to any matters relating to the merger.**

Table of Contents

Interests of Certain Persons in the Merger

Certain of Novuspharma's directors and executive officers have interests in the merger, including:

certain Novuspharma executives have entered into employment agreements with CTI, including a grant of restricted stock and severance provisions;

certain Novuspharma executives could be entitled to severance payments under Italian law if they leave their jobs after the merger;

former employees of Novuspharma, including former directors and executives of Novuspharma, will be granted options to purchase shares of CTI common stock in CTI's discretion; and

certain indemnification arrangements will be continued if the merger is completed.

See The Merger Interests of Certain Persons in the Merger.

What CTI Shareholders Will Receive in the Merger

Shares of CTI common stock will represent equity interests in the combined company following the merger of Novuspharma with and into us. There will be no need for our shareholders to exchange their share certificates. See The Merger Agreement Conversion of Novuspharma Shares in the Merger.

What Novuspharma Shareholders Will Receive in the Merger

Upon the completion of the merger, each Novuspharma ordinary share will be converted into 2.45 shares of CTI common stock. The actual share exchange will occur as soon as reasonably practicable after the effective time of the merger by means of book entry changes on the records of the Italian clearing agency, Monte Titoli S.p.A., without any need for Novuspharma ordinary shares to be tendered for exchange. See The Merger Agreement Conversion of Novuspharma Shares in the Merger.

Ownership of the Combined Company Following the Merger

At the closing of the merger, based on the number of Novuspharma ordinary shares outstanding as of June 16, 2003 and the exchange ratio of 2.45 CTI common shares for each Novuspharma ordinary share, CTI will issue approximately 16.0 million new shares of common stock to current Novuspharma shareholders. Upon completion of the merger, based on the number of Novuspharma ordinary shares outstanding as of June 16, 2003, current CTI shareholders will own approximately 67.7% of CTI's outstanding common stock and current Novuspharma

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shareholders will own approximately 32.3% of CTI's outstanding common stock. Based on the companies' respective closing share prices on June 16, 2003, the last full trading day prior to our announcement of the merger, Novuspharma's shareholders would receive an implied premium for their Novuspharma shares. The issuance of CTI common shares at any implied premium would likely result in dilution to the market price of CTI common stock. See [Risk Factors - Risks Related to the Merger](#) and [The Merger Agreement - Conversion of Novuspharma Shares in the Merger](#).

Table of Contents

Board of Directors Following the Merger

Upon completion of the merger, we will have a twelve member board composed of the nine persons currently on the CTI board of directors, at least two persons currently on the Novuspharma board of directors and a third independent director to be identified by Novuspharma and mutually agreed to by CTI and Novuspharma. Pursuant to the merger agreement, our bylaws will be amended upon completion of the merger to increase the size of the CTI board to twelve. See The Merger Agreement Corporate Organization and Governance and Management of Our Combined Company after the Merger.

Treatment of Novuspharma Options

The merger agreement provides that, prior to the effective time of the merger, the vesting of each outstanding Novuspharma stock option will be accelerated and, to the extent not exercised prior to completion of the merger, will be terminated and cancelled. CTI has agreed to issue new options to employees of Novuspharma to be determined in our discretion. The number of CTI shares subject to each new option and the vesting schedule of each new option will be determined by CTI, and the per share exercise price of each new CTI option will be equal to the greater of:

the average of the closing prices for a share of CTI common stock on the Nasdaq National Market for each trading day during the one-month period immediately preceding the completion of the merger or the closing price on the date of grant; and

the average of the closing prices for a share of CTI common stock on the Nuovo Mercato Telematico Azionario for each trading day during the one-month period immediately preceding the completion of the merger or the closing price on the date of grant.

We expect to grant these replacement options under Novuspharma's existing option plans, which we will assume upon completion of with the merger.

See The Merger Agreement Treatment of Novuspharma Options in the Merger.

Accounting Treatment of the Merger

The merger will be accounted for by CTI for financial reporting purposes under the purchase method of accounting. Accordingly, the aggregate purchase price will be allocated based upon the fair values of the assets acquired and the liabilities of Novuspharma assumed. Any excess purchase price will be recorded as goodwill. Under current generally accepted accounting principles in the United States, goodwill is no longer being amortized but instead is to be capitalized and reviewed periodically for impairment. See The Merger Accounting Treatment.

Rescission Rights; Dissenters' Rights

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Novuspharma shareholders will have rescission rights as specified under Italian law. At the closing of the merger, those Novuspharma shareholders that have exercised their rescission rights will

Table of Contents

be entitled to receive a cash payment for their Novuspharma ordinary shares in lieu of receiving any shares of CTI common stock. CTI shareholders will not have dissenters' rights in connection with the merger. See "The Merger - Rescission Rights; Dissenters' Rights." It is a condition to the closing of the merger that the amount of cash to be paid to holders of rescission shares not exceed \$25 million, although CTI and Novuspharma together can waive this condition.

Regulatory Matters

In order for the merger to be valid under Italian law, Italian law requires delivery to the shareholders of Novuspharma, by deposit at the corporate headquarters of Novuspharma and with copies to the Italian securities regulator and CONSOB of certain documents, including a report that indicates that, among other things, the valuation methods adopted by the Novuspharma board of directors are, under the circumstances, reasonable and not arbitrary and have been correctly applied by the directors in their determination of the exchange ratio contained in the merger agreement.

Also, prior to completion of the merger, CTI, Novuspharma and any shareholder of Novuspharma acquiring more than 10% of our outstanding stock could be required to give notification of the merger to U.S., EU or Italian antitrust authorities. Although we do not anticipate any such notification will be required in connection with the merger, if notification to any of these authorities is required, the parties could be required to furnish additional information and observe one or more statutory waiting periods prior to completion of the merger.

See "The Merger - Regulatory Matters."

Material U.S. Federal Tax Considerations

Generally, the exchange by Novuspharma shareholders of Novuspharma ordinary shares for shares of our common stock will not cause either Novuspharma shareholders or our shareholders to recognize any gain or loss for U.S. federal income tax purposes. However, Novuspharma shareholders might have to recognize gain or loss if their stock ownership in Novuspharma is sufficiently large. This tax treatment might not apply to all Novuspharma shareholders. A determination of the actual tax consequences of the merger to you if you are a Novuspharma shareholder can be complicated and will depend on your own specific situation and on variables not within our control or the control of Novuspharma. **Novuspharma shareholders should consult their own tax advisors for a full understanding of the tax consequences of the merger to them.** See "The Merger - Material U.S. Federal Income Tax Considerations."

Italian Tax Considerations

Generally, the merger will not cause a taxable event for Italian income tax purposes for the Novuspharma shareholders who are resident in Italy for Italian tax purposes. Furthermore, the shares of our common stock received by the Novuspharma shareholders in the merger will have the same aggregate tax basis as the Novuspharma ordinary shares held by the Novuspharma shareholders prior to the merger. However, for Novuspharma shareholders who are resident outside of Italy for Italian tax purposes, with some exceptions described below, the merger may cause taxable gain to be recognized

Table of Contents

equal to the difference between the fair market value of the shares of our common stock received and the tax basis of Novuspharma shareholder's Novuspharma ordinary shares cancelled in the merger. Exceptions to this treatment may apply to non-resident shareholders:

who own no more than two percent of the Novuspharma voting rights or no more than five percent of the Novuspharma's total outstanding equity, and who meet certain other requirements, or

who are entitled to the benefits of almost any income-tax treaty between Italy and the shareholder's country of residence.

The actual income tax consequences under Italian tax law will depend on your own specific situation and on factors not within the control of Novuspharma or us. **Novuspharma shareholders should consult their own tax advisor for a full understanding of the potential Italian tax consequences of the merger to them.** See The Merger Material Italian Tax Considerations.

Material Terms of the Merger Agreement

The merger agreement is the primary legal document that governs the merger. We have attached a copy of the merger agreement as *Appendix A* to this proxy statement/prospectus and encourage you to read it. A few of its key terms are listed below:

Conditions to Completion of the Merger

Several conditions must be satisfied before either party is obligated to complete the proposed merger, including, among others:

the required approval of CTI shareholders and Novuspharma shareholders must have been received;

the Nasdaq National Market must have approved the listing, subject to official notice of issuance, of the shares of CTI common stock issuable in connection with the merger;

the listing of CTI common stock on the Nuovo Mercato must be approved by the Borsa Italiana;

there must be no pending or threatened litigation by a governmental entity seeking to enjoin or prohibit the completion of the merger, and there must be no legal restraint or prohibition preventing the completion of the merger;

CTI's registration statement on Form S-4, of which this proxy statement/prospectus forms a part, must have been declared effective by the SEC and no stop order suspending its effectiveness may be in effect nor have been initiated, or to the knowledge of CTI or Novuspharma, threatened;

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the waiting period under any applicable antitrust laws (and any extensions thereof) must have expired or been terminated and all material antitrust approvals, if any, must have been obtained;

each party must have received a written opinion from its Italian tax counsel;

Table of Contents

the amount of cash to be paid to the holders of Novuspharma ordinary shares exercising rescission rights must not exceed \$25 million;

Novuspharma must have received a report from KPMG S.p.A. as to the valuation methods adopted by the Novuspharma board of directors in determining the exchange ratio;

the representations and warranties of the other party must be true and correct as of the closing date of the merger as though made on the closing date, or if representations and warranties expressly relate to an earlier date, then as of that date, except, in each case or in the aggregate, as does not constitute a material adverse effect on the other party;

the other party must have performed or complied in all material respects with all agreements and covenants required by the merger agreement to be performed or complied with by it on or prior to the closing date of the merger;

there must not have occurred a material adverse effect on the other party;

the two-month period provided by Italian law for Novuspharma creditor claims must have expired or otherwise been satisfied; and

the Novuspharma nominees to the CTI board must have been appointed as directors.

The merger agreement provides that any or all of the conditions to both parties' obligations may be waived by both parties together, and any or all of the conditions to either party's obligations may be waived by that party. However, the parties cannot waive any conditions imposed by law, such as receipt of necessary shareholder approvals.

See The Merger Agreement Conditions.

Prohibition on Solicitation of Other Offers

In the merger agreement, each of CTI and Novuspharma agree not to solicit, initiate or encourage, knowingly facilitate or induce any inquiries or the making of any proposal the consummation of which would result in an alternative transaction (as defined in the merger agreement) or participate in any discussions or negotiations regarding, or furnish any person any non-public information with respect to, or take any other action to facilitate any inquiries or the making of any proposal that constitutes or may be reasonably likely to lead to an alternative transaction. However, if either CTI or Novuspharma receives an unsolicited bona fide written offer or proposal with respect to an alternative transaction with respect to which its board of directors determines in good faith, after consultation with outside legal counsel, that the failure to provide information or participate in the negotiations or discussions would result in a reasonable likelihood that its board of directors would breach its fiduciary duties to its shareholders, and its shareholders have not yet approved the merger, then it may furnish information with respect to itself pursuant to a customary confidentiality agreement containing terms no less restrictive than the one between CTI and Novuspharma and may participate in negotiations regarding the unsolicited proposal.

Table of Contents

In addition to the prohibitions on solicitation of other offers, the merger agreement provides that neither Novuspharma nor CTI will withdraw, qualify or modify, or propose publicly to withdraw, qualify or modify, in a manner adverse to the other party, the approval or recommendation by its board of the merger or the merger agreement, unless:

in the case of CTI, if its board determines in good faith, after consultation with outside legal counsel, that the failure to take such action would result in a reasonable likelihood that its board would breach its fiduciary duties to CTI's shareholders under applicable laws; and

in the case of Novuspharma, if Novuspharma receives a superior proposal (as defined in the merger agreement), and after receipt of advice from outside counsel its board determines in good faith that the failure to take such action would result in a reasonable likelihood that its board would breach its fiduciary duties to Novuspharma's shareholders under applicable laws, and Novuspharma complies with certain conditions described in the merger agreement.

Each of CTI and Novuspharma must submit the merger to its shareholders for a vote even if its board changes, withdraws, qualifies or modifies its recommendation relating to the merger.

See The Merger Agreement No Solicitation of Transactions.

Termination of the Merger Agreement

Under circumstances specified in the merger agreement, each company may terminate the merger agreement. These circumstances include, among others:

if the terminating party is not in material breach of any representation, warranty, covenant or other agreement contained in the merger agreement, upon certain breaches of the other party's representations, warranties, covenants or agreements (but only after a 30-day cure period if the breach is curable by April 15, 2004 through exercise of commercially reasonable efforts);

if the merger is not consummated by April 15, 2004;

if any required shareholder approval is not obtained;

at any time prior to the terminating party's shareholders' meeting, by the board of directors of the terminating party if the other party's board of directors has:

failed to recommend without modification or qualification that the other party's shareholders approve the merger and the transactions contemplated by the merger agreement;

subsequently withdrawn its recommendation;

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modified or qualified its recommendation in a manner adverse to the terminating party's interests; or

failed to reconfirm its recommendation within ten business days following a written request from the terminating party to do so.

See The Merger Agreement Termination.

Table of Contents

Termination Fee

If the merger agreement is terminated under certain circumstances, either we or Novuspharma could be required to pay a termination fee of \$4.75 million to the other party.

See The Merger Agreement Termination Fee.

Comparison of Rights of CTI Shareholders and Novuspharma Shareholders

After the completion of the merger, Novuspharma shareholders will become shareholders of our company, and their rights as shareholders of our company will be governed by Washington law, our articles of incorporation and our bylaws. There are substantive differences between Washington law and Italian law and between our articles of incorporation and bylaws and Novuspharma's governing documents. See Comparison of Rights of CTI Shareholders and Novuspharma Shareholders.

Comparative Stock Prices and Dividends

Shares of our common stock currently trade in the United States on the Nasdaq National Market under the symbol CTIC, and Novuspharma ordinary shares currently trade in Italy on the Nuovo Mercato under the symbol NOV.MI. The following table presents:

the last reported per share sales price of our common stock;

the last reported per share sales price of Novuspharma ordinary shares, stated in euros;

the last reported per share sales price of Novuspharma ordinary shares, converted to dollars at the exchange rate then prevailing; and

the implied value of the merger consideration of 2.45 shares of CTI common stock per Novuspharma ordinary share, based on the closing price of CTI common stock on each of the dates shown;

in each case on June 16, 2003, the last full trading day prior to the public announcement of the proposed merger, and on • •, 2003, which is a recent date prior to the date of this proxy statement/prospectus. The implied value of the merger consideration has been determined by multiplying the last reported sales price per share of CTI common stock on each date by 2.45, which is the exchange ratio in the merger. Neither we nor Novuspharma have ever paid dividends.

Date

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	CTI	Novuspharma		Implied Value of Merger
	Common Stock	Ordinary Shares		Consideration per
	(dollars)	(euros)	(dollars)*	Novuspharma Ordinary Share
				(dollars)
June 16, 2003	\$ 14.75	22.59	\$ 26.76	\$ 36.14
• •, 2003	\$		\$	\$

* Based on the exchange rate then prevailing.

The market prices of our common stock and Novuspharma's ordinary shares and the exchange rate between the U.S. dollar and the euro fluctuate. You should obtain current market quotations and exchange rates.

See Comparative Stock Prices and Dividends.

Table of Contents**Comparative Historical and Pro Forma Combined Per Share Data**

The following table sets forth historical per share data of CTI and Novuspharma and combined per share data on an unaudited pro forma basis after giving effect to the proposed merger based on the fixed exchange ratio of 2.45 shares of CTI common stock for each Novuspharma ordinary share, and resulting in the issuance of approximately 16.0 million shares of CTI common stock. This number is based on the total outstanding Novuspharma ordinary shares as of March 31, 2003.

The pro forma per share data presented below is based on CTI's and Novuspharma's unaudited pro forma combined per share data for the three months ended March 31, 2003 and the year ended December 31, 2002. You should read this information along with the selected historical financial data, the unaudited pro forma condensed combined financial statements and the separate audited historical consolidated financial statements of CTI and Novuspharma and the notes thereto incorporated into or included elsewhere in this proxy statement/prospectus. The unaudited pro forma combined per share data is not necessarily indicative of the operating results that would have been achieved had the proposed merger been consummated January 1, 2002 or the financial position at March 31, 2003 had the proposed merger been consummated at that date. You should not consider the data to be representative of future operating results of the combined company.

The historical book value per share of common stock as of March 31, 2003 and as of December 31, 2002 is computed by dividing total shareholders' equity by the number of shares of common stock outstanding at the end of each period. The pro forma combined book value per share as of March 31, 2003 is computed by dividing pro forma shareholders' equity by the pro forma number of shares of common stock as of the end of March 31, 2003. The equivalent pro forma loss per share is computed by multiplying the pro forma loss per share by the fixed 2.45 exchange ratio, and the equivalent pro forma book value per share is computed by multiplying the pro forma combined book value per share by the fixed 2.45 exchange ratio.

	As of and for the Three Months Ended March 31, 2003	As of and for the Year Ended December 31, 2002
Historical Cell Therapeutics, Inc.		
Basic and diluted net loss per share	\$ (0.92)	\$ (1.48)
Book value per share	0.40	1.32
Historical Novuspharma		
Basic and diluted net loss per share	(1.20)	(4.65)
Book value per share	15.87	17.01
Pro forma combined		
Basic and diluted net loss per share	\$ (0.79)	\$ (1.59)
Book value per share	3.05	
Equivalent pro forma combined per Novuspharma share		
Basic and diluted net loss per share	\$ (1.94)	\$ (3.90)
Book value per share	7.48	

Table of Contents

Selected CTI Historical Consolidated Financial Data

Set forth below is selected historical financial information with respect to CTI as of the dates and for the periods indicated. The statement of operations data set forth below for the three months ended March 31, 2003 and 2002 and the balance sheet data as of March 31, 2003 have been derived from CTI's financial statements which have not been audited and are incorporated in this proxy statement/prospectus by reference. The statement of operations data set forth below for the fiscal years ended December 31, 2002, 2001 and 2000 and the balance sheet data as of December 31, 2002 and 2001 have been derived from CTI's financial statements which have been audited and are incorporated in this proxy statement/prospectus by reference. The statement of operations data set forth below for the fiscal years ended December 31, 1999 and 1998 and the balance sheet data as of December 31, 2000, 1999 and 1998 have been derived from CTI's financial statements which have been audited, but are not included or incorporated by reference in this proxy statement/prospectus. The unaudited financial statements include all adjustments, consisting of recurring adjustments which CTI considers necessary for a fair presentation of its financial position and results of operations for these periods.

Operating results for the three months ended March 31, 2003 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2003 or any other future interim period. The following selected historical financial information of CTI should be read in conjunction with CTI's Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements of CTI and related notes thereto, which are incorporated in this proxy statement/prospectus by reference to CTI's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2002 and Quarterly Report on Form 10-Q for the three months ended March 31, 2003. See [Where You Can Find More Information](#).

Table of Contents

	Three Months Ended March 31,		Year Ended December 31,				
	2003	2002	2002	2001	2000	1999	1998
(In thousands, except per share data)							
Consolidated Statement of Operations Data:							
Revenues:							
Product sales	\$ 4,310	\$ 1,521	\$ 11,393	\$ 6,130	\$ 502	\$	\$
License and contract revenue	571	162	5,503	106			13,200
Total revenues	4,881	1,683	16,896	6,236	502		13,200
Operating expenses:							
Cost of product sold	146	105	423	394	19		
Research and development(1)	20,628	11,060	58,759	44,669	26,574	27,682	29,942
Selling, general and administrative	13,008	11,190	49,800	35,268	20,421	9,788	10,889
Amortization of purchased intangibles(2)	334	1,675	6,701	9,390	9,390		
Total operating expenses	34,116	24,030	115,683	89,721	56,404	37,470	40,831
Loss from operations	(29,235)	(22,347)	(98,787)	(83,485)	(55,902)	(37,470)	(27,631)
Other income (expense):							
Investment income	654	1,662	4,819	9,200	4,517	1,692	3,094
Interest expense	(1,888)	(2,875)	(11,240)	(5,988)	(544)	(502)	(435)
Gain on exchange of convertible subordinated notes			55,305				
Other income (expense), net	(1,234)	(1,213)	48,884	3,212	3,973	1,190	2,659
Net loss	(30,469)	(23,560)	(49,903)	(80,273)	(51,929)	(36,280)	(24,972)
Preferred stock dividend				(1,372)	(508)	(5,201)	
Net loss applicable to common shareholders	\$ (30,469)	\$ (23,560)	\$ (49,903)	\$ (81,645)	\$ (52,437)	\$ (41,481)	\$ (24,972)
Basic and diluted net loss per common share	\$ (0.92)	\$ (0.67)	\$ (1.48)	\$ (2.41)	\$ (2.07)	\$ (2.67)	\$ (1.62)
Shares used in computation of basic and diluted net loss per common share	33,114	35,008	33,763	33,822	25,345	15,552	15,410

(1) Amount in 2001 includes an equity-based expense of \$9.2 million related to the issuance of 350,000 warrants for the achievement of a XYOTAX milestone.

(2) Effective January 1, 2002, we adopted Statement of Financial Accounting Standards (SFAS) 142 *Goodwill and Other Intangible Assets*. SFAS 142 requires that goodwill no longer be amortized.

Table of Contents

	March 31,	December 31,				
	2003	2002	2001	2000	1999	1998
	(In thousands)					
Consolidated Balance Sheet Data:						
Cash, cash equivalents, securities available-for-sale and interest receivable	\$ 111,060	\$ 142,157	\$ 259,421	\$ 156,434	\$ 24,248	\$ 47,072
Working capital	101,240	129,849	250,142	146,384	17,705	44,143
Total assets	151,673	186,780	303,750	190,111	30,848	58,156
Convertible senior subordinated notes(3)	85,500	85,500				
Convertible subordinated notes	29,600	29,600	175,000			
Other long-term obligations, less current portion	5,921	6,704	3,892	1,060	2,653	3,888
Total long-term obligations, less current portion	121,021	121,804	178,892	1,060	2,653	3,888
Accumulated deficit	(370,924)	(340,455)	(290,552)	(210,279)	(158,350)	(122,070)
Total shareholders' equity	13,252	43,483	109,557	177,943	20,904	47,165

(3) On June 23, 2003, CTI issued 4% convertible senior subordinated notes resulting in gross proceeds of \$75 million.

Table of Contents

Selected Novuspharma Historical Consolidated Financial Data

The following selected financial data related to the statement of operations for the years ended December 31, 2002, 2001 and 2000, and the balance sheet data as of December 31, 2002, 2001 are derived from Novuspharma's audited financial statements presented in euros which are prepared in accordance with U.S. GAAP, appearing elsewhere in this proxy statement/prospectus. The financial data related to the statement of operations for the years ended December 31, 1999 and 1998 and the balance sheet data as of December 31, 2000, 1999, and 1998 are derived from Novuspharma's unaudited financial statements presented in euros which are prepared in accordance with U.S. GAAP, and which are not included in this proxy statement/prospectus. The financial data related to the statement of operations for the three month period ended March 31, 2003 and 2002 and the balance sheet data at March 31, 2003 are derived from Novuspharma's unaudited financial statements presented in euros which are prepared in accordance with U.S. GAAP, and which are included in this proxy statement/prospectus. The unaudited financial statements include all adjustments, consisting of recurring adjustments, which Novuspharma considers necessary for a fair presentation of its financial position and results of operations for these periods.

Operating results for the three months ended March 31, 2003 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2003 or any other future interim period. The following data should be read together with Management's Discussion and Analysis of Financial Condition and Results of Operations of Novuspharma and the financial statements, related notes and other financial information of Novuspharma included in this proxy statement/prospectus. See the Novuspharma financial statements starting on page FIN-1. Novuspharma was originally formed on September 21, 1983 but did not begin operations until January 1, 1999 following the spin-off of the oncology research and development department of Boehringer Mannheim Italia S.p.A. from F. Hoffman-La Roche Ltd.

Table of Contents

Amounts in accordance with U.S. GAAP

	Three Months Ended		Year Ended December 31,				
	2003	2002	2002	2001	2000	1999	1998
	(unaudited)	(unaudited)				(unaudited)	(unaudited)
(In thousands, except share and per share amounts)							
Statement of Operations Data:							
Revenues:							
Research grants	56		5,493	1,396	78		
Research services provided to third parties	109		65	90	1,045	1,910	
Total revenues	165		5,558	1,486	1,123	1,910	
Operating expenses:							
Research and development	(6,921)	(5,938)	(33,861)	(14,440)	(8,179)	(4,176)	
General and administrative	(1,757)	(1,627)	(6,478)	(5,388)	(2,998)	(2,540)	(9)
Amortization of purchased intangibles	(1)	(1)	(2)	(183)	(183)	(182)	
Total operating expenses	(8,679)	(7,566)	(40,341)	(20,011)	(11,360)	(6,898)	(9)
Loss from operations	(8,514)	(7,566)	(34,783)	(18,525)	(10,237)	(4,988)	(9)
Other income (expense):							
Investment income	510	86	1,921	15	2		
Interest income (expense)	239	993	2,502	6,506	1,158	(37)	
Gain on foreign currency	19	7	174	39	41		
Other income (expense), net	768	1,086	4,597	6,560	1,201	(37)	
Loss before taxation	(7,746)	(6,480)	(30,186)	(11,965)	(9,036)	(5,025)	(9)
Income taxes							(1)
Net loss	(7,746)	(6,480)	(30,186)	(11,965)	(9,036)	(5,025)	(10)
Basic and diluted net loss per ordinary share							
	(1.20)	(0.99)	(4.65)	(1.83)	(1.95)	(1.54)	(0.00)
Shares used in calculation of basic and diluted net loss per ordinary share							
	6,477,159	6,532,594	6,491,771	6,553,551	4,640,242	3,262,142	2,000,000

Amounts in accordance with U.S. GAAP

	Three Months Ended March 31, 2003 (unaudited)	December 31,				
		2002	2001	2000 (unaudited)	1999 (unaudited)	1998 (unaudited)
Balance Sheet Data:						
Cash, cash equivalents and securities available-for-sale	101,433	108,343	140,836	156,036	2,372	99
Total assets	113,028	121,658	149,721	160,962	6,800	136
Other long-term obligations, less current portion	1,391	1,155	825	715	618	
Accumulated deficit during the development stage	(64,664)	(56,580)	(26,026)	(14,061)	(5,025)	(45)
Total shareholders' equity	103,066	110,236	141,931	154,966	2,157	60

Table of Contents

Selected Unaudited Pro Forma Combined Financial Data of CTI and Novuspharma

The following selected unaudited pro forma combined balance sheet data as of March 31, 2003 and the selected unaudited pro forma combined statement of operations data for the three months ended March 31, 2003 and the year ended December 31, 2002 are based on the historical consolidated financial statements of CTI and Novuspharma after giving effect to the proposed merger using the purchase method of accounting. The financial information of Novuspharma has been reclassified to conform Novuspharma's presentation format to that of CTI. The selected unaudited pro forma combined financial data is based on estimates and assumptions which are preliminary. The unaudited pro forma combined financial statements do not purport to represent what CTI's financial position or results of operations actually would have been if the proposed merger had in fact occurred on the dates indicated or to project CTI's financial position or results of operations as of any future date or for any future period.

For pro forma purposes:

CTI's balance sheet as of March 31, 2003 has been combined with Novuspharma's balance sheet as of March 31, 2003 as if the proposed merger had occurred on March 31, 2003;

CTI's unaudited statement of operations for the three months ended March 31, 2003 has been combined with Novuspharma's unaudited statement of operations for the three months ended March 31, 2003 as if the proposed merger had occurred on January 1, 2002; and

CTI's statement of operations for the year ended December 31, 2002 has been combined with Novuspharma's statement of operations for the year ended December 31, 2002 as if the proposed merger had occurred on January 1, 2002.

The Novuspharma amounts combined in the pro forma combined financial statements referred to above were translated to U.S. dollars using a spot rate of 1.092 as of March 31, 2003 and an average rate of 1.0736 and .94525 for the three months ended March 31, 2003 and the year ended December 31, 2002, respectively.

Under the purchase method of accounting, the total estimated purchase price of \$197.2 million, calculated as described in Note 1 to the unaudited pro forma condensed combined financial statements, is allocated to the net tangible and intangible assets acquired in connection with the proposed merger, based on management's estimates of fair values as of March 31, 2003. A preliminary valuation of intangible assets was performed by an independent third party as the basis for the estimates of the fair value of the intangible assets reflected in the unaudited pro forma condensed combined financial statements. A final determination of fair values, which cannot be made prior to the completion of the proposed merger, will be based on the final valuation. This final valuation will be based on the actual net tangible and intangible assets of Novuspharma that exist as of the date of completion of the proposed merger. In addition to the effect of the final valuation, the timing of completion of the proposed merger, and other changes in Novuspharma's net tangible assets which occur prior to completion of the proposed merger could cause material differences in the information presented.

These selected unaudited pro forma combined financial data should be read in conjunction with the historical financial statements and the related notes thereto of Novuspharma and Management's Discussion and Analysis of Financial Condition and Results of Operations of Novuspharma included elsewhere in this proxy statement/prospectus. This data should also be read in conjunction with CTI's

Table of Contents

historical consolidated financial statements and related notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations, which are incorporated herein by reference to CTI's Annual Report on Form 10-K/A for the year ended December 31, 2002 and Quarterly Report on Form 10-Q for the three months ended March 31, 2003, and Management's Discussion and Analysis of Financial Conditions and Results of Operations of Novuspharma, included elsewhere in this proxy statements/prospectus.

See Unaudited Pro Forma Condensed Combined Financial Statements of CTI and Novuspharma.

Table of Contents**Selected Unaudited Pro Forma Combined Financial Data****of Cell Therapeutics, Inc. and Novuspharma S.p.A.**

	Three Months Ended March 31, 2003	Year Ended December 31, 2002
(in thousands, except per share data)		
Pro Forma Combined Statement of Operations Data:		
Revenues:		
Product sales	\$ 4,310	\$ 11,393
License and contract revenue	748	10,757
Total revenues	5,058	22,150
Operating expenses:		
Cost of product sold	146	423
Research and development	28,112	90,981
Selling, general and administrative	14,918	56,020
Amortization of purchased intangibles	335	6,703
Total operating expenses	43,511	154,127
Loss from operations	(38,453)	(131,977)
Other income (expense):		
Investment income	1,479	9,164
Interest expense	(1,888)	(11,240)
Gain on exchange of convertible subordinated notes		55,305
Other income (expense), net	(409)	53,229
Net loss	\$ (38,862)	\$ (78,748)
Basic and diluted net loss per common share	\$ (0.79)	\$ (1.59)
Shares used in calculation of basic and diluted net loss per common share	49,028	49,677
	March 31, 2003	
	(in thousands)	
Pro Forma Combined Balance Sheet Data:		
Cash, cash equivalents and securities available-for-sale	\$ 220,313	
Working capital	200,515	
Total assets	302,992	
Convertible subordinated and senior subordinated notes(1)	115,100	
Other long-term obligations, less current portion	7,437	
Accumulated deficit	(427,683)	

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Total shareholders' equity

149,709

(1) On June 23, 2003, CTI issued 4% convertible senior subordinated notes resulting in gross proceeds of \$75 million.

See Notes to Unaudited Pro Forma Condensed Combined Financial Statements beginning on p. 136

Table of Contents

RISK FACTORS

CTI and Novuspharma will operate as a combined company following the merger in a market environment that cannot be predicted and that involves significant risks, many of which will be beyond our control. In addition to the other information contained in or incorporated by reference into this proxy statement/prospectus, you should carefully consider the risks described below before deciding how to vote your shares of CTI common stock. The risks described below are not the only ones facing our combined company. Additional risks and uncertainties that are not presently known to CTI and Novuspharma that are not currently believed to be material, if they materialize, also may adversely affect the merger and CTI and Novuspharma as a combined company.

Risks Related to the Merger

The issuance of shares of CTI common stock to Novuspharma shareholders in the merger will substantially reduce the percentage interests of CTI shareholders.

If the merger is completed, approximately 16.0 million shares of CTI common stock will be issued to current Novuspharma shareholders, and former Novuspharma shareholders will own approximately 32.3% of the outstanding common stock of CTI after the merger, based on the number of Novuspharma ordinary shares outstanding as of June 16, 2003. The issuance of these shares to current Novuspharma shareholders will cause a significant reduction in the relative percentage interests of current CTI shareholders in earnings, voting, liquidation value and book and market value. In addition, as described under Comparative Stock Prices and Dividends, based on the companies' respective closing share prices on June 16, 2003, which was the last full trading day prior to our announcement of the merger, Novuspharma shareholders would receive an implied premium for their shares. The issuance of CTI common shares at any implied premium would likely result in dilution to the market price of CTI common stock. The issuance of additional shares in future transactions could further reduce the percentage interests of current CTI shareholders and Novuspharma shareholders. In addition, CTI expects to issue options to purchase CTI common stock to employees of Novuspharma. If and when those options are exercised, it will cause further dilution to the holders of CTI common stock.

Our combined company may not achieve the benefits expected from the merger.

If our combined company is to realize the benefits of the merger, including the anticipated growth opportunities and synergies from combining CTI's business with the business of Novuspharma, our combined company must successfully integrate CTI's technology, operations and personnel with those of Novuspharma. The integration of CTI and Novuspharma will be a challenging, complex, time-consuming and expensive process and may disrupt both companies' businesses if not completed in a timely and efficient manner. The challenges involved in this integration include the following:

Effectively pursuing the clinical development and regulatory approvals of our and Novuspharma's product candidates (including XYOTAX and Pixantrone) while effectively marketing CTI's current approved product (TRISENOX);

Successfully commercializing products under development and increasing revenues from TRISENOX;

Retaining existing strategic partners;

Table of Contents

Retaining and integrating management and other key employees of both CTI and Novuspharma;

Coordinating research and development activities to enhance introduction of new products and technologies;

Integrating purchasing and procurement operations in multiple locations;

Maintaining an adequate level of liquidity to fund our combined company's continuing operations and expansion;

Integrating the business cultures of CTI and Novuspharma and maintaining employee morale, particularly in light of an anticipated reduction in workforce;

Transitioning all facilities to a common information technology system;

Developing and maintaining uniform standards, controls, procedures and policies that comply with both U.S. and Italian laws and regulations;

Maintaining adequate focus on the core business of the combined company while integrating operations;

Maintaining relationships with employees, strategic partners, manufacturers and suppliers while integrating management and other key personnel; and

Coping with unanticipated expenses related to integration of the two companies.

Our combined company may not succeed in addressing these challenges or any other problems encountered in connection with the merger, which may be exacerbated by the geographic separation of CTI and Novuspharma. Our combined company's U.S. officers will be located in Seattle, Washington, in the United States, while our combined company's Italian officers will be located in Bresso (Milan), Italy. In addition, our European headquarters will be moved from the United Kingdom to Novuspharma's offices in Bresso (Milan), Italy following the merger. If management is not able to address these challenges, our combined company may not achieve the anticipated benefits of the merger, which may have a material adverse effect on our combined company's business and could result in the loss of key personnel.

Because the exchange ratio in the merger is fixed, CTI shareholders are exposed to the risk that the market price of CTI's common stock could increase or the market price of Novuspharma ordinary shares could decrease.

Under the merger agreement, each Novuspharma ordinary share will convert into the right to receive 2.45 shares of CTI common stock. This exchange ratio is a fixed number and will not be adjusted if the price of CTI common stock or Novuspharma ordinary shares increases or decreases prior to the completion of the merger. The prices of CTI common stock and Novuspharma ordinary shares at the closing of the merger might vary from their prices on the date of this proxy statement/prospectus and on the date of the special meeting of CTI shareholders. These prices might vary because of changes in the business, operations or prospects of CTI or Novuspharma, market assessments of the likelihood that the merger will be completed, the timing of the completion of the merger, the prospects of post-merger operations, regulatory considerations, general market and economic conditions and other factors. Because the date that the merger is completed will be later than the date of the special meeting of CTI shareholders, the prices of CTI common stock and Novuspharma ordinary shares on the date of the special meeting of CTI

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shareholders might not be indicative of their respective prices on the date the merger is completed. As a result, the market value of the shares of CTI

Table of Contents

common stock that CTI will be required to issue to former Novuspharma shareholders upon completion of the merger might be greater than the value attributed to Novuspharma's business and assets at the time the merger agreement was entered into and/or the date the merger is approved by our shareholders. We urge CTI shareholders to obtain current market quotations for CTI common stock and Novuspharma ordinary shares, and to be aware that the relative prices of CTI common stock and Novuspharma ordinary shares might change dramatically after the special meeting of CTI shareholders.

Our combined company may be required to pay \$25 million or more to Novuspharma shareholders who exercise rescission rights in connection with the merger.

Under Italian law, Novuspharma shareholders that properly exercise their rescission rights will be entitled to receive a cash payment for their Novuspharma ordinary shares, which cash payment is determined by averaging the closing price for a Novuspharma ordinary share on the Nuovo Mercato over the six months prior to the date on which Novuspharma shareholders approve the merger. Pursuant to the merger agreement, neither CTI nor Novuspharma will be obligated to complete the merger if the aggregate amount to be paid to dissenting Novuspharma shareholders exceeds \$25 million. The payment of any amount to Novuspharma shareholders who exercise rescission rights would reduce the available cash reserves of our combined company. At March 31, 2003, CTI and Novuspharma combined had cash, cash equivalents and unrestricted investments totaling \$220.3 million (based on exchange rates then prevailing) and we expect that our combined company's pro forma cash, cash equivalents and unrestricted investments at December 31, 2003 will be \$175.0 million (based on the same exchange rates). As a closing condition, this \$25 million limit may be waived only with the consent of both CTI and Novuspharma. If the amount of claims from dissenting shareholders exceeds \$25 million and the parties agree to waive this closing condition and elect to complete the merger, the cash reserves of our combined company would be reduced to that extent.

Our combined company might be required to repay some or all of the Italian research grants and loan subsidies previously received by Novuspharma as a result of the merger and might not qualify or be approved for new grants and subsidies following the merger.

Novuspharma has historically funded a portion of its operations through research grants and loan subsidies awarded by Italian authorities. Upon completion of the merger, it is intended that the grants and subsidies will be transferred to an Italian branch of CTI and subsequently contributed to a newly-formed Italian subsidiary of CTI. Under the terms of the grants and subsidies obtained by Novuspharma, these transfers require advance written approval from the Italian bank authorized to make the disbursement on behalf of the government and from the appropriate Italian authorities. We face the risk that one or both of the transfers might not be approved by the applicable bank and/or by the Italian authorities, in which case our combined company might be required to repay some or all of the grants and subsidies received (pursuant to Italian Laws 451/94 and DM 954/97 No. 232) prior to the merger, in the aggregate amount of up to approximately \$6.5 million as of March 31, 2003 and may forfeit outstanding grants and subsidies not yet disbursed as of March 31, 2003 by the authorized bank, in the aggregate amount of up to approximately \$7.6 million as of March 31, 2003. Following the completion of the merger, our planned Italian subsidiary will be eligible to apply for new research grants and subsidies from the Italian and EU authorities. However, the grants and subsidies are awarded in the discretion of those authorities and we cannot assure you that the Italian subsidiary will qualify or be approved for any grants or subsidies that may be applicable to it. For a more detailed description of the Italian and EU grant and subsidy programs, see "Conditions in Italy and the European Union Governmental Support of Medical Research and Training."

Table of Contents

Our combined company's reported financial results will suffer as a result of purchase accounting treatment.

In accordance with United States generally accepting accounting principles, we will account for the merger using the purchase method of accounting, which will result in charges to earnings that could have a material adverse effect on the market value of our common stock following the completion of the merger. Under the purchase method of accounting, we will allocate the total estimated purchase price to Novuspharma's net tangible assets, intangible assets with indefinite lives and in-process research and development based on their fair values as of the date of completion of the merger, and record the excess of the purchase price over those fair values as goodwill, if any. We will expense the portion of the estimated purchase price allocated to in-process research and development in the quarter in which the merger is completed. We will incur additional depreciation and amortization expense over the useful lives of certain of the net tangible and intangible assets acquired in connection with the merger. In addition, to the extent that the intangible assets become impaired, we may be required to incur material charges relating to the impairment of those assets. These depreciation, amortization, in-process research and development, potential impairment and other non-cash charges could have a material impact on the results of operations of our combined company.

The costs associated with the merger could adversely affect our combined company's financial results.

We and Novuspharma expect to incur combined direct transaction costs of approximately \$8.5 million in connection with the merger and substantial additional costs in connection with the integration of our and Novuspharma's businesses. If the benefits of the merger do not exceed the costs associated with the merger, including the costs of integrating the businesses of CTI and Novuspharma, our combined company's financial results could be adversely affected.

There are many conditions to the completion of the merger and we cannot assure you that the merger will be completed.

There are many conditions to our and Novuspharma's obligations to complete the merger. Many of these conditions are beyond our and Novuspharma's control. For example, we must obtain, as a condition to our and Novuspharma's obligation to complete the merger, approval from the Italian securities authorities for the listing of our common stock on the Nuovo Mercato stock exchange, as well as other regulatory approvals. We and Novuspharma will make any required United States, Italian and European filings with the appropriate regulatory authorities, but the requirements for these approvals could delay the completion of the merger for a significant period of time after the CTI shareholders and Novuspharma shareholders have approved the proposals relating to the merger at their respective special meetings. We cannot assure you that these consents and approvals will be obtained, or that these consents and approvals will be obtained without materially adverse restrictions or conditions that would have a material adverse effect on us or our combined company. Even if regulatory approvals are obtained, any federal, state or foreign governmental agency or private person may challenge the merger at any time before or after its completion.

Although this proxy statement/prospectus may speak as though the merger will be consummated, you should realize that those statements anticipate the completion of the merger on the terms of the merger agreement. We cannot assure you that the merger will be completed.

Table of Contents

Risks Related to International Expansion

If the merger is completed, CTI will increase the scope of its European operations, which will increase CTI's costs of doing business and might result in additional, unexpected challenges.

If the merger is completed, our European operations will be expanded and our European headquarters will be relocated to Italy. This expansion will cost us time and resources, such as:

our management will need to devote additional time to overseeing operations in an additional country;

language barriers within our company might result in misunderstandings, improperly executed instructions and additional translation costs; and

internal transportation and communications costs will increase in order for personnel, resources and ideas to be shared with an additional operation center.

The increased time and resources we spend to manage operations in Italy will result in an increase in our historical costs of doing business. Also, the addition of Italian operations might present other challenges. For example, the cultural differences between business operations (generally including employer-employee relations) in the United States and those in Italy might reduce some of the benefits of the merger.

If the merger is completed, CTI will be required to comply with an additional national regulatory structure, which could result in administrative challenges.

If the merger is completed, our operations will need to comply with applicable laws of and rules of the United States (including Washington law and the rules and regulations of the Securities and Exchange Commission and the Nasdaq National Market), the EU legal system and the Republic of Italy (including the rules and regulations of CONSOB and Borsa Italiana, which collectively regulate companies listed on Italy's public markets such as the Nuovo Mercato). Conducting our operations in a manner that complies with all applicable laws and rules will require us to devote additional time and resources to regulatory compliance matters, which costs might be substantial, and might cause delays. For example:

issuing each material announcement in both English and Italian might cause administrative challenges as we seek to time the simultaneous release of such announcements in both languages;

producing financial statements and quarterly (and other periodic) reports under two sets of standards, and approving translations of each significant document into the other language will be expensive and might distract our executives from their primary focus of managing our business, and language translations themselves might lead to inaccuracies; and

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 both regulatory regimes.

Table of Contents

If the merger is completed, we will be subject to risks relating to fluctuations in the exchange rate of the dollar relative to the euro, which could cause costs to be greater than we expect and introduce additional volatility in our reported quarterly results.

Following the completion of the merger we will be exposed to risks associated with foreign currency transactions insofar as we might desire to use dollars to make contract payments denominated in euros or vice versa. As the net positions of our unhedged foreign currency transactions might fluctuate, our earnings might be negatively affected. In addition, following the completion of the merger, we will be exposed to risks associated with the translation of Novuspharma's euro-denominated financial results and balance sheet into U.S. dollars. The reporting currency of CTI will remain as the U.S. dollar, however, a portion of our consolidated financial obligations will arise in euros. In addition, the carrying value of some of our assets and liabilities will be affected by fluctuations in the value of the U.S. dollar as compared to the euro. Changes in the value of the U.S. dollar as compared to the euro might have an adverse effect on our reported results of operations and financial condition.

If the merger is completed, we will be subject to new legal duties and additional political and economic risks related to operations in Italy.

If the merger is completed, a portion of our business will be based in Italy. We will be subject to duties and risks arising from doing business in Italy, such as:

Italian employment law, under which our relations with our employees in Italy will be governed by collective bargaining agreements negotiated at the national level and over which we have no control;

EU data protection regulations, under which we will be unable to send private personal data, including many employment records and some clinical trial data, from our Italian offices to our U.S. offices until our U.S. offices self-certify their adherence to the safe harbor framework established by the U.S. Department of Commerce in consultation with the European Commission;

tariffs, customs, duties and other trade barriers; and

capital controls, terrorism and other political risks.

These risks related to doing business in Italy could harm the results of our operations.

Risks Related to the Business of Our Combined Company

We expect that our combined company will continue to incur losses for the foreseeable future, and we might never achieve profitability.

CTI was incorporated in 1991 and has incurred a net operating loss every year. As of March 31, 2003, CTI had an accumulated deficit of approximately \$370.9 million. Since Novuspharma began operating on January 1, 1999, Novuspharma has incurred a net operating loss every year. As of March 31, 2003, Novuspharma had an accumulated deficit of approximately \$64.7 million. Our combined company may never

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become profitable, even if we are able to commercialize additional products. Our combined company will need to conduct significant research, development, testing and regulatory compliance activities that, together with projected general and administrative expenses, we expect will result in substantial increasing operating losses for at least the next several years. Even if

Table of Contents

our combined company does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis.

If our combined company is unable to develop additional products, we may be unable to generate significant revenue or become profitable.

CTI has only one product, TRISENOX, for relapsed or refractory acute promyelocytic leukemia, or APL, that has received marketing approval to date, while none of Novuspharma's products have yet received marketing approval. CTI's leading drug candidates, TRISENOX for other indications, XYOTAX and CT-2106, and Novuspharma's leading drug candidate, Pixantrone, are currently in clinical trials. These clinical trials of the drug candidates involve the testing of potential therapeutic agents, or effective treatments, in humans in three phases to determine the safety and efficacy of the drug candidates necessary for an approved drug. Many drugs in human clinical trials fail to demonstrate the desired safety and efficacy characteristics. Even if our drugs progress successfully through initial human testing, they may fail in later stages of development. A number of companies in the pharmaceutical industry, including CTI and Novuspharma, have suffered significant setbacks in advanced clinical trials, even after reporting promising results in earlier trials. For example, in CTI's first Phase III human trial for lisofylline, completed in March 1998, CTI failed to meet its two primary endpoints, or goals, even though it met its endpoints in two earlier Phase II trials for lisofylline. As a result, CTI is no longer developing lisofylline as a potential product. In addition, data obtained from clinical trials are susceptible to varying interpretations. Government regulators and our combined company's collaborators may not agree with our interpretation of our combined company's future clinical trial results. The clinical trials of TRISENOX, XYOTAX, CT-2106 or Pixantrone or any of our combined company's future drug candidates may not be successful. Many of CTI's and Novuspharma's drug candidates are still in research and pre-clinical development, which means that they have not yet been tested on humans. Our combined company will need to commit significant time and resources to develop these and additional product candidates. We cannot assure you that:

our combined company's product candidates will be developed to a stage that will enable us to commercialize them or sell related marketing rights to pharmaceutical companies;

our combined company will be able to commercialize product candidates in clinical development or sell the marketing rights to third parties; and

product candidates, if developed, will be approved.

Our combined company will be dependent on the successful completion of clinical trials and obtaining regulatory approval in order to generate revenues. The failure to generate such revenues may preclude our combined company from continuing our research and development of these and other product candidates.

Our combined company may be required to suspend, repeat or terminate our clinical trails if they do not meet regulatory requirements, the results are negative or inconclusive, or if the trials are not well designed.

Before regulatory approval for any potential product can be obtained, we must undertake extensive clinical testing on humans to demonstrate the tolerability and efficacy of the product, both on its own terms, and as compared to the other principal drugs on the market that have the same therapeutic indication. We cannot assure you that our combined company will obtain authorization to permit product candidates that are already in the pre-clinical development phase to enter the human

Table of Contents

clinical testing phase. In addition, we cannot assure you that any authorized pre-clinical or clinical testing will be completed successfully within any specified time period by our combined company, or without significant additional resources or expertise to those originally expected to be necessary. We cannot assure you that such testing will show potential products to be safe and efficacious or that any such product will be approved for a specific indication. Further, the results from pre-clinical studies and early clinical trials may not be indicative of the results that will be obtained in later-stage clinical trials. In addition, our combined company or regulatory authorities may suspend clinical trials at any time on the basis that the participants are being exposed to unacceptable health risks.

Completion of clinical tests depends on, among other things, the number of patients available for testing, which is a function of many factors, including the number of patients with the relevant conditions, the nature of the clinical testing, the proximity of patients to clinical testing centers, the eligibility criteria for tests as well as competition with other clinical testing programs involving the same patient profile but different treatments. Our combined company will rely on third parties, such as contract research organizations and/or co-operative groups, to assist us in overseeing and monitoring clinical trials as well as to process the clinical results and manage test requests, which may result in delays or failure to complete trials, if the third parties fail to perform or to meet the applicable standards. A failure by us or such third parties to keep to the terms of a product program development for any particular product candidate or to complete the clinical trials for a product candidate in the envisaged time frame could have significant negative repercussions on our combined company's business and financial condition.

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

Since CTI's inception in 1991 and since Novuspharma's beginning operations in 1999, both companies have dedicated substantially all of their resources to the research and development of their technologies and related compounds. With the exception of TRISENOX for relapsed or refractory APL, all of CTI's and Novuspharma's compounds currently are in research or development, and none have been submitted for marketing approval. Our combined company's other compounds may not enter human clinical trials on a timely basis, if at all, and our combined company may not develop any product candidates suitable for commercialization.

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

be found ineffective or cause harmful side effects during pre-clinical testing or clinical trials;

fail to receive necessary regulatory approvals;

be difficult to manufacture on a large scale;

be uneconomical to produce;

fail to achieve market acceptance; or

be precluded from commercialization by proprietary rights of third parties.

Table of Contents

Our combined company's product development efforts or our combined company's collaborative partners' efforts may not be successfully completed and our combined company may not obtain required regulatory approvals. Any products, if introduced, may not be successfully marketed nor achieve customer acceptance.

If the combined company fails to establish and maintain collaborations or if its partners do not perform, we may be unable to develop and commercialize our product candidates.

CTI and Novuspharma have each entered into collaborative arrangements with third parties to develop and/or commercialize product candidates. Additional collaborations might be necessary in order for our combined company to fund our research and development activities and third-party manufacturing arrangements, seek and obtain regulatory approvals and successfully commercialize our existing and future product candidates. If our combined company fails to maintain our existing collaborative arrangements or fails to enter into additional collaborative arrangements, the number of product candidates from which we could receive future revenues would decline.

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

collaborative arrangements might not be on terms favorable to our combined company;

disagreements with partners may result in delays in the development and marketing of products, termination of our collaboration agreements or time consuming and expensive legal action;

we cannot control the amount and timing of resources partners devote to product candidates or their prioritization of product candidates and partners may not allocate sufficient funds or resources to the development, promotion or marketing of our products, or may not perform their obligations as expected;

partners may choose to develop, independently or with other companies, alternative products or treatments, including products or treatments which compete with ours;

agreements with partners may expire or be terminated without renewal, or partners may breach collaboration agreements with us;

business combinations or significant changes in a partner's business strategy might adversely affect that partner's willingness or ability to complete its obligations to our combined company; and

the terms and conditions of the relevant agreements may no longer be suitable.

We cannot assure you that our combined company will be able to negotiate future collaboration agreements or that those currently in existence will make it possible for our combined company to fulfill our objectives.

Because CTI and Novuspharma based several of their drug candidates on unproven novel technologies, our combined company may never develop them into commercial products.

CTI and Novuspharma base many of their product candidates upon novel delivery technologies that they are using to discover and develop drugs for the treatment of cancer. These technologies have

Table of Contents

not been proven. Furthermore, pre-clinical results in animal studies may not predict outcome in human clinical trials. Our combined company's product candidates may not be proven safe or effective. If these technologies do not work, our combined company's drug candidates may not develop into commercial products.

Our combined company may not complete our clinical trials in the time expected, which could delay or prevent the commercialization of our products.

Although for planning purposes we forecast the commencement and completion of clinical trials, the actual timing of these events can vary dramatically due to factors such as delays, scheduling conflicts with participating clinicians and clinical institutions and the rate of patient enrollment. Clinical trials involving our combined company's product candidates may not commence nor be completed as forecasted. Our combined company will have limited experience in conducting clinical trials. In certain circumstances our combined company will rely on academic institutions or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving our products. In addition, certain clinical trials for our combined company's products will be conducted by government-sponsored agencies and consequently will be dependent on governmental participation and funding. Our combined company will have less control over the timing and other aspects of these clinical trials than if we conducted them entirely on our own. These trials may not commence or be completed as we expect. They may not be conducted successfully. Failure to commence or complete, or delays in, any of our combined company's planned clinical trials could delay or prevent the commercialization of our products and harm our business.

If our combined company fails to protect adequately our intellectual property, our competitive position could be harmed.

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

obtain patent protection for our products and processes in the United States, Italy and other countries;

protect our trade secrets; and

prevent others from infringing on our proprietary rights.

In particular we believe that linking CTI's polymers to existing drugs may yield patentable subject matter. We do not believe that our polymer-drug conjugates will infringe any valid third-party patents covering the underlying drug. However, we may not receive any patents for our polymer conjugates and we may be challenged by the holder of a patent covering the underlying drug.

The patent position of biopharmaceutical firms generally is highly uncertain and involves complex legal and factual questions. The U.S. Patent and Trademark Office has not established a consistent policy regarding the breadth of claims that it will allow in biotechnology patents. If it allows broad claims, the number and cost of patent interference proceedings in the U.S. and the risk of infringement litigation may increase. If it allows narrow claims, the risk of infringement may decrease, but the value of our combined company's rights under our patents, licenses and patent applications may also decrease. Patent applications in which our combined company has rights may never issue as patents and the claims of any issued patents may not afford meaningful protection for our combined

Table of Contents

company's technologies or products. In addition, patents issued to us or our combined company's licensors may be challenged and subsequently narrowed, invalidated or circumvented. Litigation, interference proceedings or other governmental proceedings that our combined company may become involved in with respect to our proprietary technologies or the proprietary technology of others could result in substantial cost to our combined company. Patent litigation is widespread in the biotechnology industry, and any patent litigation could harm our combined company's business. Costly litigation might be necessary to protect our combined company's orphan drug designations or patent position or to determine the scope and validity of third party proprietary rights, and our combined company may not have the required resources to pursue such litigation or to protect our patent rights. An adverse outcome in litigation with respect to the validity of any of our combined company's patents could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using a product or technology.

Our combined company will also rely upon trade secrets, proprietary know-how and continuing technological innovation to remain competitive. Third parties may independently develop such know-how or otherwise obtain access to our combined company's technology. While in the past CTI and Novuspharma have required, and our combined company will require, employees, consultants and corporate partners with access to proprietary information to enter into confidentiality agreements, these agreements may not be honored.

If any of our combined company's license agreements for intellectual property underlying TRISENOX, XYOTAX, Pixantrone or any other products are terminated, we may lose our rights to develop or market that product.

Patents issued to third parties may cover our combined company's products as ultimately developed. Our combined company may need to acquire licenses to these patents or challenge the validity of these patents. Our combined company may not be able to license any patent rights on acceptable terms or successfully challenge such patents. The need to do so will depend on the scope and validity of these patents and ultimately on the final design or formulation of the products and services that our combined company develops. CTI has licensed intellectual property, including patent applications from The Memorial Sloan Kettering Cancer Center, Samuel Waxman Cancer Research Foundation, Beijing Medical University and others, including the intellectual property directed to arsenic drugs and TRISENOX. CTI has also in-licensed the intellectual property relating to our polymer drug delivery technology, including XYOTAX. Novuspharma has licensed intellectual property, including patent applications from The University of Vermont, F. Hoffman-La Roche and others, including some intellectual property related to Pixantrone. Novuspharma has also in-licensed the intellectual property relating to platinum complexes from F. Hoffman-La Roche. Some of our combined company's product development programs depend on our ability to maintain rights under these licenses. Each licensor has the power to terminate its agreement with either of CTI or Novuspharma or our combined company if it fails to meet its obligations under those licenses. Our combined company may not be able to meet our obligations under these licenses. If our combined company defaults under any of these license agreements, we may lose our right to market and sell any products based on the licensed technology.

If our combined company cannot enter into new licensing arrangements, its future product portfolio and potential profitability could be harmed.

One component of our combined company's business strategy is in-licensing drug compounds developed by other pharmaceutical and biotechnology companies or academic research laboratories.

Table of Contents

Following completion of the merger, substantially all of the combined product candidates in clinical development will be in-licensed from a third party, including TRISENOX, XYOTAX and Pixantrone. Competition for new promising compounds and commercial products can be intense. If our combined company is not able to identify future in-licensing opportunities and enter into future licensing arrangements on acceptable terms, its future product portfolio and potential profitability could be harmed.

Our combined company's products could infringe on the intellectual property rights of others, which may cause us to engage in costly litigation and, if we are not successful, could cause us to pay substantial damages and prohibit us from selling our products.

Although we attempt to monitor the patent filings of our competitors in an effort to guide the design and development of our products to avoid infringement, third parties may challenge the patents that have been issued or licensed to our combined company. Our combined company may have to pay substantial damages, possibly including treble damages, for past infringement if it is ultimately determined that our products infringe a third party's patents. Further, our combined company may be prohibited from selling our products before we obtain a license, which, if available at all, may require us to pay substantial royalties. Even if infringement claims against our combined company are without merit, defending a lawsuit takes significant time, may be expensive and may divert management attention from other business concerns.

Our combined company may need to raise additional funds in the future, and they may not be available on acceptable terms, or at all.

We expect that our combined company's capital resources and the interest earned thereon will enable our combined company to maintain our planned operations through at least early 2005. Beyond that time, if our combined company's capital resources are insufficient to meet future capital requirements, we will have to raise additional funds to continue the development of our technologies and complete the commercialization of products, if any, resulting from our technologies. Our combined company will require substantial funds to: (1) continue our research and development programs, (2) in-license or acquire additional technologies or products, (3) conduct pre-clinical studies and clinical trials and (4) launch new drug products. Our combined company may repeatedly need to raise additional capital to fund our operations. Our combined company may raise such capital through public or private equity financings, partnerships, debt financings, bank borrowings, or other sources. Our combined company's capital requirements will depend upon numerous factors, including the following:

the establishment of additional collaborations;

the development of competing technologies or products;

changing market conditions;

the cost of protecting our intellectual property rights;

the purchase of capital equipment;

the progress of our drug discovery and development programs, the progress of our collaborations and receipt of any option/license, milestone and royalty payment resulting from those collaborations; and

in-licensing and acquisition opportunities.

Table of Contents

Additional funding may not be available on favorable terms or at all. If adequate funds are not otherwise available, our combined company may curtail operations significantly, including the delay, modification or cancellation of research and development programs aimed at bringing new products to market. To obtain additional funding, our combined company may need to enter into arrangements that require us to relinquish rights to certain technologies, drug candidates, products and/or potential markets. To the extent that additional capital is raised through the sale of equity, or securities convertible into equity, you may experience dilution of your proportionate ownership of our combined company.

Our combined company expects to receive certain grants and subsidized loans from the Italian government and the European Community through our combined company's Italian subsidiary. We cannot assure you that our combined company will receive the relevant funding.

CTI's and Novuspharma's limited operating experience may cause our combined company difficulty in managing our growth and could seriously harm our business.

As a result of additional trials for TRISENOX for indications other than relapsed or refractory APL and clinical trials currently underway for XYOTAX and our other products in development, CTI has expanded our operations in various areas, including our management, regulatory, clinical, financial and information systems and other elements of our business process infrastructure. We may need to add additional key personnel in these areas. In addition, the merger with Novuspharma will expand further our operations with the addition of new product candidates, competencies and employees. As growth occurs, it may strain our combined company's operational, managerial and financial resources. Our combined company will not be able to increase revenues or control costs unless we continue to improve our operational, financial, regulatory and managerial systems and processes, and expand, train and manage our work force.

If our combined company fails to keep pace with rapid technological change in the biotechnology and pharmaceutical industries, our products could become obsolete.

Biotechnology and related pharmaceutical technology have undergone and are subject to rapid and significant change. We expect that the technologies associated with biotechnology research and development will continue to develop rapidly. Our combined company's future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Any compounds, products or processes that our combined company develops may become obsolete before we recover any expenses incurred in connection with developing these products.

Our combined company faces direct and intense competition from our competitors in the biotechnology and pharmaceutical industries and we may not compete successfully against them.

The biotechnology and pharmaceutical industries are intensely competitive. Our combined company will have numerous competitors in the United States and elsewhere. Our combined company's competitors include major, multinational pharmaceutical and chemical companies, specialized biotechnology firms and universities and other research institutions. Many of these competitors have greater financial and other resources, larger research and development staffs and more effective marketing and manufacturing organizations, than we do. In addition, academic and government institutions have become increasingly aware of the commercial value of their research findings. These institutions are now more likely to enter into exclusive licensing agreements with commercial enterprises, including our combined company's competitors, to market commercial

Table of Contents

products. Our combined company's competitors may succeed in developing, licensing or marketing technologies and drugs that are more effective or less costly than any we are developing, including generic drugs. Our combined company's competitors may succeed in obtaining FDA or other regulatory approvals for drug candidates before we do. In particular, our combined company will face direct competition from many companies focusing on delivery technologies. Drugs resulting from our combined company's research and development efforts, if approved for sale, may not compete successfully with our combined company's competitors' existing products or products under development.

Our combined company may be unable to attain the raw materials necessary to produce our XYOTAX product candidate in sufficient quantity to meet demand when and if such product is approved.

Paclitaxel is derived from certain varieties of yew trees. Supply of yew trees is tightly controlled by a limited number of companies. We cannot be sure that our combined company will be able to continue to purchase the materials necessary to produce XYOTAX in adequate volume and quality. We purchase the majority of the paclitaxel we need from a single vendor. We also purchase the raw material polyglutamic acid from a single source. Should the paclitaxel or polyglutamic acid purchased from our sources prove to be insufficient in quantity or quality, or should this relationship terminate, we cannot assure you that we will be able to enter into a similar agreement with an alternate source.

Our combined company's dependence on third party manufacturers means that we may not have sufficient control over the manufacture of our combined company's products.

Neither CTI nor Novuspharma currently have internal facilities for the manufacture of any of their products or product candidates for clinical evaluation or commercial production. In addition, TRISENOX, our first commercial product, is currently manufactured by a single vendor. In 2002, we began the process of qualifying an additional supplier for our finished product manufacturing for TRISENOX. This additional supplier received FDA approval to manufacture TRISENOX in June 2003, however, we cannot assure you that this additional supplier will be able to provide us with finished product if and when we need it. Our combined company will need to develop additional manufacturing resources, enter into collaborative arrangements with other parties that have established manufacturing capabilities or elect to have other third parties manufacture our products on a contract basis. Our combined company will be dependent on such collaborators or third parties to supply us in a timely way with products manufactured in compliance with standards imposed by the FDA and foreign regulatory authorities. The manufacturing facilities of contract manufacturers may not comply with applicable manufacturing regulations of the FDA nor meet our requirements for quality, quantity or timeliness. Another of our products under development, XYOTAX, is complex to manufacture, which may prevent us from obtaining a sufficient supply for the increased clinical trials that are currently planned or underway.

Our combined company may face difficulties in achieving acceptance of our products in the market if we do not continue to expand our sales and marketing infrastructure.

We currently are marketing TRISENOX with our direct sales force. Competition for these individuals is intense, and in the event we need additional sales personnel, we may not be able to hire the experience required and number of sales personnel we need. In addition, if our combined company markets and sells products other than TRISENOX, we may need to further expand our marketing and sales force with sufficient technical expertise and distribution capacity. If our combined company is

Table of Contents

unable to expand our direct sales operations and train new sales personnel as rapidly as necessary, we may not be able to increase market awareness and sales of our combined company's products, which may prevent our combined company from growing our revenues and achieving and maintaining profitability.

Our combined company will be subject to extensive government regulation, including the requirement of approval before our products may be marketed.

Regulatory agencies have approved only one of CTI's products, TRISENOX, for sale in the United States and the EU, to treat patients with APL who are refractory to, or have relapsed from, retinoid and anthracycline chemotherapy for relapsed or refractory APL. Regulatory agencies have not approved any of Novuspharma's products for sale. Before our combined company can market TRISENOX for other indications, we must obtain additional FDA and/or EMEA approval. CTI's and Novuspharma's other products are in development, and will have to be approved by the FDA before they can be marketed in the United States and by the EMEA or European national regulatory authorities before they can be marketed in the EU. Obtaining FDA and EMEA approval requires substantial time, effort and financial resources, and we cannot be sure that any approval will be granted on a timely basis, if at all. If the FDA or the EMEA does not approve CTI's or Novuspharma's products and any additional indications for marketed products in a timely fashion, or does not approve them at all, our combined company's business and financial condition may be adversely affected.

In addition, our combined company and its products will be subject to comprehensive regulation by the FDA and the EMEA both before and after products are approved for marketing. The FDA and the EMEA regulate, for example, research and development, including pre-clinical and clinical testing, safety, effectiveness, manufacturing, labeling, advertising, promotion, export, and marketing of our combined company's products. Manufacturing processes must conform to current good manufacturing practices, or cGMP, and the FDA and EMEA or European national regulatory authorities periodically inspect manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to expend time, money, and effort to maintain compliance. Also, drug manufacturers may not promote a drug for other than its approved indication, and the FDA and EMEA may institute enforcement action against companies to do so. Our combined company's failure to comply with this or other FDA or EMEA requirements may result in various adverse consequences including FDA and/or EMEA delay in approval or refusal to approve a product, recalls, seizures, withdrawal of an approved product from the market, and/or the imposition of civil or criminal sanctions. Additionally, our combined company will be subject to numerous regulations and statutes regulating the manner of selling and obtaining reimbursement for our combined company's products. For example, federal statutes generally prohibit providing certain discounts and payments to physicians to encourage them to prescribe our product. Violations of such regulations or statutes may result in treble damages, fines or exclusion of our combined company or individuals from participation in federal and state health care programs. Although our combined company will have policies prohibiting violations of relevant regulations and statutes, unauthorized actions of our combined company's employees or consultants, or unfavorable interpretations of such regulations or statutes may result in third parties or regulatory agencies bringing legal proceedings or enforcement actions against our combined company.

If our combined company loses our key personnel or we are unable to attract and retain additional personnel, our combined company may be unable to pursue collaborations or develop our own products.

Our combined company will be highly dependent on Dr. James A. Bianco, CTI's chief executive officer, and Dr. Jack W. Singer, CTI's executive vice president, research program chairman. The loss

Table of Contents

of any one of these principal members of our combined company's scientific or management staff, or failure to attract or retain other key scientific employees, could prevent our combined company from pursuing collaborations or developing our products and core technologies. Recruiting and retaining qualified scientific personnel to perform research and development work are critical to our combined company's success. There is intense competition for qualified scientists and managerial personnel from numerous pharmaceutical and biotechnology companies, as well as from academic and government organizations, research institutions and other entities. In addition, our combined company will rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development strategy. All of our combined company's consultants and advisors will be employed by other employers or are self-employed, and will have commitments to or consulting or advisory contracts with other entities that may limit their availability to our combined company.

Because there is a risk of product liability associated with our combined company's products, our combined company faces potential difficulties in obtaining insurance.

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

Uncertainty regarding third party reimbursement and health care cost containment initiatives may limit our combined company's returns.

The ongoing efforts of governmental and third party payors to contain or reduce the cost of health care will affect our combined company's ability to commercialize our products successfully. Governmental and other third party payors are increasingly attempting to contain health care costs by:

challenging the prices charged for health care, products and services;

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

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

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

denying coverage altogether.

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

Table of Contents

Even if we succeed in bringing any of our combined company's proposed products to the market, they may not be considered cost-effective and third party reimbursement might not be available or sufficient. If adequate third party coverage is not available, our combined company may not be able to maintain price levels sufficient to realize an appropriate return on our investment in research and product development. In addition, legislation and regulations affecting the pricing of pharmaceuticals may change in ways adverse to our combined company before or after any of our proposed products are approved for marketing. While we cannot predict whether any such legislative or regulatory proposals will be adopted, the adoption of such proposals could make it difficult or impossible to sell our combined company's products. TRISENOX has been reimbursed by third party payors, but there is no guarantee this reimbursement will continue.

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

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

Our combined company may not be able to conduct animal testing, which could harm our combined company's research and development activities.

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

Risks Related to the Securities Markets

Our stock price is extremely volatile, which may affect our ability to raise capital in the future.

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 months ended June 30, 2003, our stock price has ranged from a low of \$2.68 to a high of \$15.70. Fluctuations in the trading price or liquidity of our common stock may adversely affect our ability to raise capital through future equity financings.

Table of Contents

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

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

our quarterly operating results;

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

developments or disputes concerning patent or other proprietary rights;

developments in our relationships with collaborative partners;

acquisitions;

litigation and government proceedings;

adverse legislation, including changes in governmental regulation and the status of our regulatory approvals or applications;

third-party reimbursement policies;

changes in securities analysts' recommendations;

changes in health care policies and practices;

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. If a securities class action suit is filed against us, we would incur substantial legal fees and our management's attention and resources would be diverted from operating our business in order to respond to the litigation.

Because our charter documents contain certain anti-takeover provisions and we have a rights plan, it may be more difficult for a third party to acquire us, and the rights of some shareholders could be adversely affected.

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Our articles of incorporation and bylaws contain provisions that may make it more difficult for a third party to acquire or make a bid for us. These provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock. In addition, shares of our preferred stock may be issued in the future without further shareholder approval and upon such terms and conditions and having such rights, privileges and preferences, as the board of directors may determine. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of any holders of preferred stock that may be issued in the future. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, a majority of our outstanding voting stock. We have no present plans to issue any additional shares of preferred stock. In addition, we have adopted a shareholder rights plan that, along with certain provisions of our articles of incorporation, may have the effect of discouraging certain transactions involving a change of control of the company.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This proxy statement/prospectus contains or incorporates by reference statements which, to the extent that they do not recite historical fact, constitute forward-looking statements within the meaning of Section 27A of the United States Securities Act of 1933, as amended, and Section 21E of the United States Securities Exchange Act of 1934, as amended. The words believe, expect, anticipate, intend, estimate, may, might, or could and similar expressions or the negatives of these words or phrases are intended to identify forward-looking statements. CTI and Novuspharma have based these forward-looking statements on their current expectations and projections about the growth of their businesses, their financial performances and the development of our industry. Because these statements reflect our current views concerning future events, these forward-looking statements involve risks and uncertainties. Examples of these statements include, without limitation, statements regarding the following:

the benefits anticipated to result from the proposed merger;

the ability of our combined company to achieve operating efficiencies;

integration and other costs estimated to be incurred in connection with the proposed merger;

anticipated future performance of CTI, Novuspharma and our combined company;

the ability of our combined company to achieve the benefits of the merger;

the completion of the merger;

the financial results of CTI, Novuspharma and our combined company;

CTI's, Novuspharma's and our combined company's future operating expenses, including expenditures for research and development;

the ability of CTI, Novuspharma and our combined company to generate revenues;

the ability to complete clinical trials;

the ability of CTI, Novuspharma and our combined company to develop additional products;

the ability of CTI, Novuspharma and our combined company to successfully commercialize, sell, market and distribute products;

the ability of CTI, Novuspharma and our combined company to attract licensing partners;

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the ability of CTI, Novuspharma and our combined company to maintain and develop collaborative research, development and licensing relationships;

CTI's, Novuspharma's and our combined company's ability to protect its intellectual property;

competitive developments affecting CTI's, Novuspharma's and our combined company's products;

the availability of financing on acceptable terms or at all;

difficulties or delays in manufacturing;

the ability to produce adequate supplies of product candidates;

the ability to attract and retain key employees;

the ability of CTI, Novuspharma and our combined company to obtain FDA and other regulatory approvals for product candidates;

Table of Contents

the ability to comply with FDA, EMEA and Italian regulations;

exposure to product liability and other types of lawsuits and regulatory proceedings;

the availability of reimbursement from governmental and other third-party payors; and

the ability of CTI, Novuspharma and our combined company to comply with environmental laws and regulations.

Investors should note that many factors, as more fully described in Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations of Novuspharma, Business of Novuspharma and elsewhere in this proxy statement/prospectus could affect our future financial results and could cause our actual results to differ materially from those expressed in forward-looking statements contained in this proxy statement/prospectus. For additional information about factors that could cause actual results to differ materially from those described in the forward-looking statements, please see the quarterly reports on Form 10-Q and the annual reports on Form 10-K that CTI files with the Securities and Exchange Commission.

You should not place undue reliance on the forward-looking statements contained in this proxy statement/prospectus. These forward-looking statements speak only as of the date on which the statements were made. We do not undertake any obligation to update our forward-looking statements after the date of this proxy statement/prospectus for any reason, even if new information becomes available or other events occur in the future. In evaluating forward-looking statements, you should consider these risks and uncertainties, together with the other risks described from time to time in our reports and documents filed with the Securities and Exchange Commission.

All subsequent forward-looking statements attributable to CTI or Novuspharma or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

Table of Contents

THE SPECIAL MEETING OF CTI SHAREHOLDERS

This proxy statement/prospectus is being furnished to you in connection with the solicitation of proxies by the CTI board of directors in connection with the proposed merger.

Date, Time and Place of the Special Meeting

The special meeting of the shareholders of CTI is scheduled to be held as follows:

• •, 2003

• a.m., local time

•

•

Seattle, Washington

United States of America

Purpose of the Special Meeting

The special meeting is being held so that the shareholders of CTI may consider and vote upon a proposal to approve the merger and the transactions contemplated thereby, as set forth in the merger agreement, as well as to transact any other business that properly comes before the special meeting or any adjournment or continuation thereof.

After careful consideration, the CTI board of directors unanimously:

determined that the merger and the merger agreement (including the merger plan (progetto di fusione) in the form attached to the merger agreement), are advisable and fair to and in the best interests of CTI and our shareholders;

approved the merger, the merger plan, the merger agreement and the transactions contemplated by the merger agreement; and

recommends that you vote FOR the proposal to approve the merger and the transactions contemplated thereby.

Record Date and Shares Outstanding

The CTI board of directors has fixed the close of business on • •, 2003 as the record date for determination of CTI shareholders entitled to notice of and entitled to vote at the special meeting. On the record date, there were • shares of CTI s sole class of common stock issued and outstanding and held by approximately • holders of record. CTI has no outstanding voting securities other than the common stock. Every holder of CTI common stock is entitled to one vote for each share held on the record date for each proposal presented at the special meeting.

Quorum

A quorum is necessary for the transaction of most business at the special meeting. A quorum requires the presence, either in person or represented by proxy, of a majority of the shares of CTI common stock that both:

were outstanding on the record date; and

are entitled to vote.

Table of Contents

As mentioned above, at the close of business on the record date, • shares of our common stock were issued and outstanding, all of which are entitled to one vote per share on all matters. Accordingly, • shares must be present, either in person or represented by proxy, at the meeting to constitute a quorum at the special meeting.

Abstentions and Broker Non-Votes

When an eligible voter attends the meeting but decides not to vote (either in person or by proxy), his or her decision not to vote is called an abstention. Properly executed proxy cards that are marked abstain on any proposal will be treated as abstentions for that proposal. We will treat abstentions as follows:

abstentions will be treated as not voting for purposes of determining the approval of any matter submitted to the shareholders for a vote requiring a plurality, a majority or some other percentage of the votes actually cast (including the merger proposal); and

abstention shares are present and entitled to vote for purposes of determining the presence of a quorum.

Accordingly, in the case of the merger proposal, abstentions will count toward the presence of a quorum, will not be considered votes cast and will therefore have no effect on the outcome of the merger proposal.

Many of our investors do not hold our shares directly, but instead hold the shares in street name through their brokers. Brokers holding shares for their clients generally do not have authority to vote those shares on extraordinary proposals such as our merger proposal, unless the client provides specific voting instructions to the broker. When no such instructions are received, brokers are generally required to return the proxy card (or a substitute) marked with an indication that the broker lacks voting power for the proposal. This type of response is known as a broker non-vote. Broker non-votes on any proposal at the special meeting will be treated as abstentions with respect to that matter (i.e., as entitled to vote, but opting not to vote). Accordingly, broker non-votes will count toward the presence of a quorum, will not be considered votes cast and will therefore have no effect on the outcome of the merger proposal.

Vote Required

Assuming that a quorum is present, approval of the merger proposal will require the affirmative vote of a majority of the votes cast at the special meeting of CTI shareholders.

If other matters are properly brought before the special meeting, then the vote required will be determined by applicable law, Nasdaq rules, and the CTI articles of incorporation and bylaws.

Voting Agreements and Shares Controlled by Management

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Our directors and executive officers, owning collectively approximately 2.2% of the shares of our common stock outstanding as of June 16, 2003 and entitled to vote at the meeting, have entered into voting agreements with Novuspharma that commit them, subject to specified exceptions, not to sell any of their shares of CTI common stock prior to the CTI shareholder approval of the merger and to vote all of their shares of CTI common stock in favor of the merger proposal. The form of the voting agreement entered into by CTI's officers and directors appears as an exhibit to the merger agreement

Table of Contents

and is included as *Appendix B* to this proxy statement/prospectus. Essex Woodlands Health Ventures Fund IV, L.P., one of our shareholders, owning approximately 6.1% of the shares of our common stock outstanding as of June 16, 2003 and entitled to vote at the meeting, has entered into a voting agreement with Novuspharma that commits Essex Woodlands, subject to specified exceptions, not to sell more than 25% of its shares of CTI common stock prior to the earlier of the CTI shareholder approval of the merger and December 31, 2003, and to vote all of its shares of CTI common stock in favor of the merger proposal. The voting agreement entered into by Essex Woodlands appears as an exhibit to the merger agreement and is included as *Appendix C* to this proxy statement/prospectus. Accordingly, if the parties to these voting agreements vote in accordance with the terms of the voting agreements, and assuming the parties to the voting agreements do not sell any of their shares of CTI common stock, the vote of approximately 13,869,851 additional shares of our common stock (or approximately 41.7% of the outstanding shares of our common stock as of June 16, 2003) will be required to approve the merger proposal, assuming that 100% of the shares of CTI common stock are represented at the special meeting. For a summary of material provisions of the voting agreements with Novuspharma, see *The Merger Summary of Material Terms of Voting Agreements*.

On June 16, 2003, our directors and executive officers beneficially owned 2,774,723 shares of our common stock (not including any shares subject to unexercised options), all of which are subject to the voting agreements referred to above. These shares held by our directors and executive officers represented approximately 8.3% of 33,279,148 shares of common stock outstanding on June 16, 2003. Each of our directors and executive officers has indicated that he or she intends to vote for approval of the merger proposal.

Voting of Proxies

All shares of our common stock represented by properly executed proxies received before or at the special meeting or any adjournment thereof will, unless the proxies are revoked, be voted in accordance with the instructions indicated on them. Properly executed proxies that do not contain voting instructions will be voted FOR approval of the merger proposal. Every CTI shareholder is urged to mark the box on the proxy indicating how the shareholder wishes to vote the shareholder's shares or, if you are a holder of record of CTI common stock, by voting by telephone or electronically over the Internet in accordance with the instructions set forth on the enclosed proxy card. The deadline for voting by telephone or the Internet is 12:00 noon, Eastern time, on ●●, 2003.

We do not expect that any matter other than the merger proposal will be brought before the special meeting. If other matters are properly presented to the special meeting, the persons named as proxies will vote in accordance with their judgment with respect to those matters, unless authority to do so is withheld in the proxy. If there are not enough affirmative votes initially present (or represented by proxy) at the special meeting to approve the merger proposal, the chairman of the meeting may move to adjourn or postpone the meeting to permit further solicitation of proxies by CTI and its board in hope of obtaining a sufficient number of proxies to approve the merger proposal. In any such vote, the persons named as proxies will vote for any such proposal to adjourn or postpone the meeting; provided, however, that no proxy which is voted against the merger proposal will be voted in favor of any such adjournment or postponement.

Table of Contents

Revocability of Proxies

A shareholder may revoke the shareholder's proxy at any time before it is voted by:

notifying in writing the Secretary of CTI, 501 Elliott Avenue West, Suite 400, Seattle, Washington 98119, United States of America;

granting a subsequent proxy;

appearing in person and voting at the special meeting (attendance at the special meeting will not in and of itself constitute revocation of a proxy);

if you voted by telephone or the Internet, you may revoke your vote in the same manner prior to 12:00 noon, Eastern time on • •, 2003.

Solicitation of Proxies

We have hired Innisfree M&A Incorporated as our proxy solicitor to assist in the distribution of proxy materials and solicitation of votes at an estimated cost of \$25,000 plus customary fees for services performed and reimbursement of expenses. We also reimburse brokerage houses and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation materials to shareholders.

Novuspharma Special Meeting; Vote Required; Posting of Shareholder Approval; Voting Agreements

Novuspharma will hold a special meeting of its shareholders to vote upon the proposed merger at about the same time as the CTI special meeting. In order for Novuspharma to complete the merger, two-thirds of the Novuspharma ordinary shares present (or represented by proxy) at the Novuspharma special meeting must be voted in favor of the merger as long as the required attendance quorum for the special meeting is satisfied.

The Novuspharma board of directors approved the merger and is informing Novuspharma shareholders of the terms of the proposed transaction by, among other means, a separate document, the *Documento Informativo*, under Italian law. In accordance with applicable Italian law, the *Documento Informativo* will be deposited at the registered office of Novuspharma in Bresso (Milan), Italy and at the offices of the Borsa Italiana in Milan, Italy at least 10 days prior to the Novuspharma special meeting, where it will be available for examination by Novuspharma shareholders.

Novuspharma will announce the special shareholders meeting by publishing a notice in the Official Gazette of the Italian Republic, which notice may indicate three different dates on which the special meeting may be validly held (i.e., the first, second and third calls). The notice must be published at least 30 days before the first call. In the event that the meeting cannot be validly held at the first call (because, for example, an

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insufficient number of shares are represented at the meeting), the meeting may be held at the second call, at the relevant date and time indicated in the notice. In the event that the meeting cannot be validly held at the second call, the meeting may be held at the third call, at the relevant date and time indicated in the notice. Any special shareholders meeting must also comply with (i) attendance quorum rules, and (ii) resolution quorum rules under Italian law and Novuspharma's bylaws. With regard to the attendance quorum rules, if the meeting is held at the first call, more than a majority of the outstanding Novuspharma ordinary shares must be present; if the meeting is held at the second call, more than one-third of the outstanding Novuspharma ordinary shares

Table of Contents

must be present; and if the meeting is held at the third call, more than one-fifth of the outstanding Novuspharma ordinary shares must be present. The affirmative vote of at least two-thirds of the votes present at each call are required to approve the merger.

Provided that resolutions approving the merger are duly adopted by the Novuspharma shareholders at the special meeting, under Italian law, the resolutions must be registered with the Italian Companies Register and a two month waiting period must be observed prior to the filing of the merger deed whereby the merger will be effected. During this waiting period, creditors of Novuspharma may challenge the merger before an Italian court of competent jurisdiction. In such a case, the court may still authorize the completion of the merger upon the posting of a bond sufficient to satisfy the creditors' claims.

The following directors and executive officers of Novuspharma, owning collectively approximately 13.0% of the Novuspharma ordinary shares outstanding as of June 16, 2003 and entitled to vote at the special meeting of Novuspharma shareholders, have entered into voting agreements with us that commit them, subject to specified exceptions, not to sell any of their Novuspharma ordinary shares prior to the Novuspharma shareholder approval or any postponement thereof and to vote all of their Novuspharma ordinary shares in favor of the merger: Alberto Bernareggi, Max Brauchli, Maria Gabriella Camboni, Ennio Cavalletti, Michele Garufi, Cesare Parachini, Gabriella Pezzoni, Erich Platzer and Silvano Spinelli. The form of the voting agreement entered into by Novuspharma's officers and directors appears as an exhibit to the merger agreement and is included as *Appendix D* to this proxy statement/prospectus. 3i Group plc, HBM Bio Ventures (Cayman) Ltd. and Novuspharma Invest NV, three of Novuspharma's shareholders, owning collectively approximately 47% of the Novuspharma ordinary shares outstanding as of June 16, 2003 and entitled to vote at the special meeting of Novuspharma shareholders, have entered into voting agreements with us that commit those shareholders, subject to specified exceptions, not to sell their Novuspharma ordinary shares prior to the earlier of the Novuspharma shareholder approval of the merger and December 31, 2003 and to vote all of their Novuspharma ordinary shares in favor of the merger. The form of the voting agreement entered into by 3i Group, HBM Bio Ventures and Novuspharma Invest appears as an exhibit to the merger agreement, and is included as *Appendix E* to this proxy statement/prospectus. Accordingly, if all of the parties to these voting agreements vote in favor of the merger, and assuming the parties to these voting agreements do not sell any of their Novuspharma ordinary shares, the vote of approximately 450,000 additional Novuspharma ordinary shares (or 7% of the Novuspharma ordinary shares outstanding as of June 16, 2003 and entitled to vote) will be required to approve the merger, assuming that 100% of the Novuspharma ordinary shares are represented at the special meeting. Therefore, the existence of these voting agreements does not ensure approval of the merger by the Novuspharma shareholders. For a summary of the material provisions of the voting agreements with CTI, see *The Merger Summary of Material Terms of Voting Agreements*.

On June 16, 2003, Novuspharma directors and executive officers beneficially owned 853,732 Novuspharma ordinary shares (not including any shares subject to unexercised options), all of which are subject to the voting agreements referred to above. The shares held by Novuspharma directors and executive officers represented approximately 13% of Novuspharma's ordinary shares outstanding on June 16, 2003.

Table of Contents

THE MERGER

This section of the proxy statement/prospectus describes the proposed merger. Although CTI and Novuspharma believe that the following description covers the material terms of the merger and the related transactions, this summary might not contain all of the information that is important to you. You should carefully read this entire proxy statement/prospectus for a more complete understanding of the merger.

General

The merger agreement provides that Novuspharma will merge with and into CTI at the effective time of the merger, with CTI continuing in existence as the surviving corporation. As the surviving corporation, CTI will succeed to and assume all of the rights and obligations as well as the assets and liabilities of both CTI and Novuspharma, in accordance with Washington and Italian law.

Background of the Merger

Management of each of CTI and Novuspharma regularly reviews strategic opportunities available to it as part of its ongoing evaluation of changes in the marketplace and opportunities to strengthen its business in general and its product portfolio in particular. These opportunities include, but are not limited to, potential acquisitions or dispositions, collaborations, licensing arrangements or other strategic transactions. In late 2002, CTI internally identified Pixantrone, a drug candidate being developed by Novuspharma, as a potential candidate for collaboration.

During 2002, the Novuspharma board of directors and Novuspharma management began to develop strategies to secure its future by seeking opportunities to partner with another company in an effort to strengthen the commercial prospects for its products. Consequently, in December 2002, Novuspharma retained SG Cowen to act as Novuspharma's financial advisor in connection with the exploration and evaluation of strategic alternatives available to it. From time to time from December 2002 through February 2003, Novuspharma and SG Cowen, on behalf of Novuspharma, had a number of conversations with companies other than CTI to explore opportunities to improve the competitive position of Novuspharma, including potential acquisitions or dispositions of assets, mergers, licensing transactions and other strategic transactions. All of these conversations were exploratory in nature and did not progress beyond the preliminary stage.

In December 2002, Novuspharma's financial advisor contacted James A. Bianco, CTI's president and chief executive officer, to discuss the possibility of exploring a potential business combination involving CTI and Novuspharma. Based on that conversation, on December 10, 2002, CTI and Novuspharma entered into a mutual confidentiality and standstill agreement to allow the exchange of confidential information between the two companies and their advisors.

On December 12, 2002, Dr. Bianco and Edward F. Kenney, CTI's chief operating officer, met in London with Silvano Spinelli, chief executive officer and managing director of Novuspharma, Maria Gabriella Camboni, director of development of Novuspharma, Cesare Parachini, chief financial officer of Novuspharma, and Richard Forrest, then chief operating officer of Novuspharma, at which meeting each of CTI and Novuspharma provided the other with an overview of its business and operations, and discussed the possibility of pursuing a business combination. Following that meeting, the parties determined to continue discussions regarding a possible business combination.

Table of Contents

On January 31, 2003, Dr. Bianco, Jack Singer, research program chairman of CTI, Mr. Kenney, Michael Mumford, then executive vice president of CTI, Peggy Hawkins, vice president, portfolio management of CTI, and Steven Lynn, director, business development of CTI, and representatives of CIBC World Markets, CTI's financial advisor, met with members of Novuspharma management, including Dr. Spinelli and Erich Platzer, chairman of the Novuspharma board of directors, and representatives of SG Cowen and began CTI's initial business diligence review of Novuspharma at Novuspharma's offices in Bresso (Milan), Italy.

On February 23, 2003, Dr. Bianco met with Dr. Spinelli, Dr. Platzer, Joel Besse and Antoine Papiernik, all of whom are directors of Novuspharma, in Seattle, Washington. During this meeting, the parties discussed issues associated with the business combination, the potential governance and management of the combined company and potential strategic synergies of the business combination.

On February 24, 2003, Dr. Spinelli, Dr. Platzer, Mr. Besse and Mr. Papiernik met with representatives of CTI and began Novuspharma's initial business diligence review of CTI at CTI's offices in Seattle.

During the second half of March and the first week of April 2003, representatives of CTI and Novuspharma and their advisors had numerous teleconferences and meetings to discuss the potential terms and conditions of a proposed merger between CTI and Novuspharma, including the structure of the transaction in light of accounting, business and legal challenges arising from a combination involving a U.S. public company and an Italian public company, the potential governance and management of the combined company and potential strategic synergies of the business combination and various other business terms.

On April 9, 2003, Dr. Spinelli met with Dr. Bianco and other members of CTI's management at CTI's offices in Seattle to discuss issues relating to the integration of the businesses of CTI and Novuspharma, potential synergies, product development and pipelines, and other terms of the proposed transaction.

On April 14, 2003, representatives of Gianni, Origoni, Grippo & Partners, Studio Legale, CTI's Italian counsel, commenced a legal due diligence review of Novuspharma at Novuspharma's offices in Bresso (Milan), Italy.

On April 16, 2003, the CTI board of directors held a special meeting. Louis Bianco, chief financial officer of CTI, and representatives of CIBC World Markets and Wilson Sonsini Goodrich & Rosati, Professional Corporation, U.S. counsel to CTI, also attended the meeting. Dr. Bianco reviewed with the CTI board of directors the potential opportunities presented by a strategic transaction with Novuspharma and the status of discussions with Novuspharma. The CTI board of directors then authorized Dr. Bianco and the other members of CTI's management and CTI's advisors to continue their discussions with, and due diligence on, Novuspharma.

On April 22 and April 23, 2003, Dr. Bianco, Mr. Bianco, Dr. Singer, Dr. Lynn and Ms. Hawkins, and representatives of CTI's advisors met with representatives of Novuspharma and its financial advisor and Italian legal counsel and conducted legal, financial, scientific and regulatory due diligence on Novuspharma at Novuspharma's offices in Bresso (Milan), Italy.

On April 24, 2003, the Novuspharma board of directors held a meeting at Novuspharma's offices in Bresso (Milan), Italy. The Novuspharma board of directors formed an M&A committee consisting

Table of Contents

of Dr. Platzer, Dr. Spinelli, Mr. Besse, Mr. Papiernik and David Ebsworth. The Novuspharma board of directors established the M&A committee to oversee negotiations with CTI and to report to the Novuspharma board of directors about material discussions and actions relating to the potential transaction.

From April 28 through April 30, 2003, representatives of Novuspharma, its financial advisor and U.S. counsel met with representatives of CTI and its financial advisor and U.S. counsel and conducted legal, financial, scientific and regulatory due diligence on CTI at CTI's offices in Seattle.

Beginning on May 5, 2003, representatives of CTI and Novuspharma and their advisors commenced negotiating the terms of definitive agreements in connection with the proposed transaction, including an agreement and plan of merger, the Italian-law governed merger plan, voting and shareholder agreements, and employment agreements with some of Novuspharma's executives. These negotiations continued by way of teleconferences throughout the month of May 2003. During this time, each of CTI and Novuspharma and their advisors continued their due diligence review of the other party.

On May 8, 2003, members of Novuspharma's management and the Novuspharma board of directors, representatives of SG Cowen, Chiomenti Studio Legale, Italian counsel to Novuspharma, and Skadden, Arps, Slate, Meagher & Flom LLP, Novuspharma's U.S. counsel, met to discuss the status of the negotiations with CTI, to consider the preliminary due diligence review conducted on CTI, and to discuss the terms and conditions and structure of the proposed business combination.

From May 13 through May 15, 2003, Dr. Bianco, Mr. Bianco, Ms. Hawkins, Dr. Singer and Dr. Lynn met in New York City with Dr. Spinelli, Dr. Platzer and Dr. Camboni to discuss the potential organizational structure of, and business roles in, the combined company, potential strategic synergies and plans for the business integration of CTI and Novuspharma.

On May 21, 2003, Dr. Bianco had a teleconference with Dr. Spinelli and Dr. Platzer to discuss the status of the transaction and open issues relating to the draft definitive transaction documents.

On May 21, 2003, the CTI board of directors held a special meeting. Mr. Bianco and representatives of CIBC World Markets and Wilson Sonsini Goodrich & Rosati, also attended the meeting. Wilson Sonsini Goodrich & Rosati described to the CTI directors their duties and responsibilities in connection with the proposed transaction. CTI management reviewed with the CTI board of directors the status of discussions with Novuspharma, the strategic rationale for the proposed transaction, the scope and results of its legal, financial, scientific and regulatory due diligence investigation of Novuspharma and the risks and potential negative impacts of the proposed transaction and possible strategies for mitigating those risks. CIBC World Markets reviewed with the CTI board of directors a financial overview of Novuspharma and financial aspects of the proposed transaction. Following discussion about these reviews, Wilson Sonsini Goodrich & Rosati reviewed with the CTI board of directors the draft definitive agreements as they had been negotiated to date with Novuspharma and its advisors, including the merger agreement, the shareholders' agreements and the voting agreements.

From May 25 through May 28, 2003, the Novuspharma M&A Committee held several meetings, during which Novuspharma's Italian and U.S. legal counsel participated, to discuss, in particular, the remaining key open legal and business issues regarding the draft merger agreement and also to define the merger plan in light of Italian law requirements.

Table of Contents

From May 27 through May 30, 2003, Dr. Bianco, Mr. Bianco, and representatives of CTI's advisors, met with Dr. Spinelli, Dr. Platzer and Mr. Besse and representatives of Novuspharma's advisors at Skadden, Arps, Slate, Meagher & Flom LLP's offices in New York City to negotiate the terms of the definitive agreements.

On May 29, 2003, Novuspharma's M&A committee held a meeting, in which Novuspharma's U.S. and Italian legal counsel also participated, to receive an update on the status of the negotiations with CTI and the legal documents relating to the merger.

On May 30, 2003, the CTI board of directors held a special meeting. Mr. Bianco and representatives of CIBC World Markets and Wilson Sonsini Goodrich & Rosati also attended the meeting. Dr. Bianco updated the CTI board of directors on the status of the negotiations between CTI and Novuspharma regarding the exchange ratio in the proposed transaction. Dr. Bianco also updated the CTI board of directors on the status of negotiations regarding the definitive agreements and the plan for communicating the transaction to the market. Wilson Sonsini Goodrich & Rosati then reviewed with the CTI board of directors the terms of the proposed voting agreements to be entered into by directors, officers and major shareholders of CTI and Novuspharma in connection with the proposed transaction.

On May 31, 2003, the CTI board of directors held another special meeting. Mr. Bianco and representatives of CIBC World Markets and Wilson Sonsini Goodrich & Rosati also attended the meeting. Wilson Sonsini Goodrich & Rosati reviewed with the CTI board of directors the terms of the merger agreement, including the mechanics of the share exchange in the merger, the parties' representations and warranties, the parties' covenants (including covenants relating to solicitation of alternative transactions), conditions to the merger and the provisions for termination of the merger agreement and payment of a termination fee. Wilson Sonsini Goodrich & Rosati then reviewed with the CTI board of directors the terms of the ancillary documents to be entered into in connection with the merger agreement, including the voting agreements to be entered into by shareholders of CTI and Novuspharma, the shareholders' agreements to be entered into by the major shareholders of Novuspharma and the employment agreements to be entered into by CTI with three key employees of Novuspharma. Wilson Sonsini Goodrich & Rosati also reviewed with the CTI board of directors the proposed composition and size of the CTI board of directors following the closing of the merger, as negotiated in connection with the merger agreement, including a proposed amendment to CTI's bylaws to increase the size of the CTI board of directors. CIBC World Markets then updated the CTI board of directors regarding financial aspects of the transaction.

On June 1, 2003, the Novuspharma M&A committee informed Max Brauchli and Michele Garufi, the members of the Novuspharma board of directors not on the M&A committee, in a teleconference, of the status of the negotiations with CTI, and, with the participation of Novuspharma's legal advisors in the same teleconference, reviewed the terms of the proposed draft merger agreement. The directors also discussed the proposed terms of the draft voting agreements to be entered into by shareholders of CTI with Novuspharma. The M&A committee informed the other directors that there were still additional business and legal issues to address with CTI, and additional clinical and business due diligence to be conducted on CTI.

During the week of June 2, 2003, representatives of Novuspharma conducted additional clinical and business due diligence on CTI, both on-site at CTI's offices in Seattle and via teleconference.

Table of Contents

From June 2 through June 12, 2003, the Novuspharma M&A committee held frequent teleconferences to discuss developments with respect to the ongoing clinical and business due diligence on CTI, and in this regard it also discussed and analyzed, with the participation of SG Cowen, current market conditions with respect to CTI and Novuspharma shares and business prospects of the combined entity.

Between June 10 and June 16, 2003, representatives of CTI and Novuspharma and their advisors held numerous conference calls to negotiate the terms of the merger agreement and related documents.

On June 16, 2003, the Novuspharma board of directors held a special meeting. All Novuspharma directors attended this meeting as well as representatives of SG Cowen, Chiomenti Studio Legale and Skadden, Arps, Slate, Meagher & Flom LLP. Dr. Spinelli updated the Novuspharma board of directors on negotiations with CTI and, based on discussions and negotiations with Novuspharma, proposed to the Novuspharma board of directors an exchange ratio of 2.45 shares of CTI common stock for each ordinary share of Novuspharma. SG Cowen then presented its financial analyses of the transaction with a 2.45 exchange ratio to the Novuspharma board of directors and delivered its oral opinion, subsequently confirmed in writing, to the Novuspharma board of directors that, as of June 16, 2003, the exchange ratio was fair, from a financial point of view, to the shareholders of Novuspharma. Novuspharma's legal advisors then updated the Novuspharma board of directors with respect to the terms and conditions of the definitive agreements. Following discussion about the terms of the transaction, including the financial terms, the Novuspharma board of directors approved, by unanimous vote, the merger agreement (together with the merger plan required by Italian law), the voting agreements to be executed by Novuspharma and the transactions contemplated by those documents, and authorized Dr. Platzer and Dr. Spinelli to execute the necessary agreements and take any necessary actions to consummate the merger pursuant to the terms of the definitive agreements. The Novuspharma board of directors also appointed KPMG S.p.A. as the expert required by Italian law to issue a report on the fairness of the exchange ratio.

Also on June 16, 2003, the CTI board of directors held a special meeting. Mr. Bianco and representatives of CIBC World Markets and Wilson Sonsini Goodrich & Rosati also attended the meeting. Dr. Bianco updated the CTI board of directors on negotiations with Novuspharma with respect to the exchange ratio in the proposed transaction and, based on discussions and negotiations with Novuspharma, proposed to the CTI board of directors an exchange ratio of 2.45. Wilson Sonsini Goodrich & Rosati updated the CTI board of directors with respect to the terms and conditions of the definitive agreements. CIBC World Markets reviewed with the CTI board of directors its financial analysis of the 2.45 exchange ratio and delivered to the CTI board of directors an oral opinion, confirmed by delivery of a written opinion delivered the same date, as to the fairness, from a financial point of view, to CTI of the exchange ratio, as more fully described below under Opinion of CTI's Financial Advisor. Following discussion, the CTI board of directors approved by unanimous vote the merger agreement (together with the merger plan required by Italian law), the voting agreements, the shareholders' agreements, the employment agreements, the amended and restated bylaws of CTI and the transactions contemplated by those documents, and authorized execution of those agreements.

Representatives of CTI and Novuspharma, the relevant shareholders and employees of Novuspharma and the relevant shareholders of CTI, as the case may be, executed the merger agreement, the voting agreements, the shareholders' agreements and the employment agreements on June 16, 2003.

Table of Contents

Before the opening of trading of Novuspharma's ordinary shares and CTI's common stock on June 17, 2003, CTI and Novuspharma issued joint press releases announcing execution of the merger agreement.

On June 27, 2003, the merger plan was filed and registered with the register of enterprises in Milan, Italy as required by Italian law.

On June 27, 2003, the parties submitted a request for a favorable tax ruling to the Milan tax authorities.

CTI's Reasons for the Merger; Recommendation of the CTI Board of Directors

After careful consideration, the CTI board of directors unanimously:

determined that the merger and the merger agreement (including the merger plan (progetto di fusione) in the form attached to the merger agreement), are advisable and fair to and in the best interests of CTI and our shareholders;

approved the merger, the merger plan, the merger agreement and the transactions contemplated by the merger agreement; and

recommends that you vote **FOR** the proposal to approve the merger and the transactions contemplated thereby.

During the course of its deliberations, the CTI board of directors considered, with the assistance of CTI's management and its legal and financial advisors, a number of factors. The following discussion of the information and factors the CTI board of directors considered in making its decision is not intended to be exhaustive but includes the material factors considered by the CTI board of directors.

In reaching its conclusion that the merger is advisable and fair to and in the best interests of CTI and our shareholders, and in deciding to approve the merger agreement, the CTI board of directors considered the following potentially positive factors:

The acquisition of Novuspharma adds a pivotal stage high margin hematology/oncology product (Pixantrone) to our pipeline that is synergistic with our current portfolio, including our current marketed product TRISENOX.

The complementary product portfolios of CTI and Novuspharma should better position us to grow our commercial market potential (and should allow us to eliminate less promising product candidates).

The acquisition of Novuspharma should give us a stronger European presence that is expected to allow us access to patients, healthcare providers and potential partners in the EU.

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The acquisition of Novuspharma is expected to strengthen our balance sheet, and will provide us access to Novuspharma's cash, cash equivalents and securities available for sale totaling approximately \$110.6 million as of March 31, 2003 (based on exchange rates then prevailing).

Significant time and cost savings are expected to result from:

using Novuspharma as a base for European clinical development, regulatory affairs and sales and marketing;

Table of Contents

leveraging Novuspharma's chemistry, manufacturing and controls, or CMC, capabilities, early development expertise and real time vendor oversight and management capabilities, which will allow us to bring currently outsourced activities in-house; and

the ability to manage ex-US clinical sites from Novuspharma and utilize Novuspharma's pharmaco-vigilance (its ability to monitor the safety and quality of drugs) in lieu of vendors.

The merger should provide an opportunity to effectively utilize the skills and resources of the combined companies and their respective management teams—we have strengths in oncology sales and marketing and late stage clinical development, but currently outsource much of this activity to qualified vendors, while Novuspharma's expertise has focused primarily on predevelopment activities (medicinal chemistry, analytical development and testing, pre-clinical toxicology, pharmacology) and early Phase I/II clinical development.

The merger is expected to provide us with an improved platform for future growth and enhance our oncology market presence through the acquisition of Pixantrone and Novuspharma's expertise in predevelopment and early clinical development.

The merger should provide us with an expanded European presence from which to market our future products to the European market.

The merger should provide additional infrastructure, management talent and financial resources to facilitate further initiatives to grow CTI's presence in the pharmaceutical industry.

The merger should improve CTI's ability to conduct expensive clinical trials by providing access to Novuspharma's cash reserves.

The financial presentation of CIBC World Markets, including its opinion delivered June 16, 2003 to the CTI board of directors as to the fairness, from a financial point of view and as of the date of the opinion, to CTI of the exchange ratio, as more fully described below under "Opinion of CTI's Financial Advisor" and which opinion is included as *Appendix G* to this proxy statement/prospectus.

The CTI board of directors also considered the following potentially negative factors:

Substantial management time and effort will be required to close the transaction and integrate the businesses of CTI and Novuspharma.

The merger will subject us to new risks, including those risks listed above under the caption "Risk Factors—Risks Related to the Merger."

The additional shares to be issued in furtherance of the merger will be dilutive to holders of our common stock.

Significant legal, financial advisor and accounting fees will be incurred in connection with negotiating and closing the transaction, which are currently estimated to total approximately \$8.5 million for the combined company.

Significant costs will be incurred in connection with the integration of the businesses of CTI and Novuspharma and the integration will be challenging, which may be exacerbated by the geographic separation of the companies.

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The merger agreement restricts our ability to solicit offers from potential acquirers of 50% or more of our stock or assets and, if we were to do so, or if we were to terminate the merger

Table of Contents

agreement under certain circumstances (or if our actions were to cause Novuspharma to terminate under certain circumstances), all as described in The Merger Agreement Termination Fee, we might be required to pay Novuspharma a \$4.75 million termination fee.

The potential benefits sought in the merger might not be fully realized.

The merger might not be consummated, or consummation of the merger might be unduly delayed, and public announcement of the merger in such a case may have a negative effect on:

our business; and

our ability to attract and retain key management, marketing and scientific personnel.

Despite the efforts of the combined company, key scientific and management personnel might not remain employed by the combined company.

The merger may have a negative impact on our collaborators and employees, and a reduction in force of approximately 50-60 employees is expected in connection with the merger.

The investment community might respond negatively to the proposed transaction.

The other risks associated with the transaction described under Risk Factors.

The CTI board of directors also considered the following material information and factors in reaching its determination to approve the merger and to recommend that CTI shareholders approve the merger:

historical information concerning our and Novuspharma's respective businesses, prospects, financial performance and condition, operations, technology and management;

the financial condition and businesses of CTI and Novuspharma before and after giving effect to the merger;

current financial market conditions and historical market prices, volatility and trading information with respect to our common stock and the Novuspharma ordinary shares;

the relationship between the market value of the Novuspharma ordinary shares and the consideration to be paid to shareholders of Novuspharma in the merger;

the terms of the merger agreement, including the parties' representations, warranties and covenants;

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other strategic alternatives for CTI, including the potential to enter into strategic relationships with third parties, seek financing in the public markets or acquire or combine with third parties; and

reports from management, legal and financial advisors as to the results of the due diligence investigation of Novuspharma.

We cannot assure you that the expected results, efficiencies, opportunities or other benefits described in this section will be achieved as a result of the transaction.

The CTI board of directors did not find it necessary to, and did not quantify or otherwise assign relative weights to, the foregoing factors or determine that any factor was of particular importance. Rather, the CTI board of directors views its recommendation as being based on the totality of the information presented to, and considered by, it. The CTI board of directors considered all these factors

Table of Contents

and determined that these factors, as a whole, supported the conclusions and recommendations described above.

Novuspharma's Reasons for the Merger; Recommendation of the Novuspharma Board of Directors

After careful consideration, the Novuspharma board of directors of directors unanimously:

determined that the merger and the merger plan (progetto di fusione) in the form attached to the merger agreement, are advisable and fair to and in the best interests of Novuspharma and its shareholders;

approved the merger plan; and

resolved to recommend the approval of the merger and the transactions contemplated by the merger agreement.

During the course of its deliberations, the Novuspharma board of directors considered, with the assistance of Novuspharma's management and its legal and financial advisors, a number of factors. The following discussion of the information and factors the Novuspharma board of directors considered in making its decision is not intended to be exhaustive but includes the material factors considered by the Novuspharma board of directors.

In reaching its conclusion that the merger is advisable and fair to and in the best interests of Novuspharma and its shareholders, and in deciding to approve the merger and the merger plan, the Novuspharma board of directors considered the following potentially positive factors:

The merger should provide greater liquidity for Novuspharma's shareholders in the form of a public market for CTI common stock.

The merger should allow Novuspharma to commercialize its product candidates (following receipt of regulatory approvals) in the most important world markets and to gain access to U.S. capital markets.

The complementary product portfolios of CTI and Novuspharma will better position the combined company to grow its commercial market potential (and allow it to eliminate less promising product candidates).

The merger should give Novuspharma a stronger U.S. presence that will allow it access to patients, healthcare providers and potential partners in the U.S.

The merger should provide additional infrastructure, management talent and financial resources to facilitate further initiatives to grow Novuspharma's presence in the pharmaceutical industry.

The merger should improve in-licensing and out-licensing opportunities, and enable Novuspharma to offer a more attractive portfolio to potential licensees.

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The merger might accelerate the discovery of new clinical candidates by integrating the companies' technological platforms.

The combined company could benefit from the potential synergies created by combining the later stage development products of CTI with Novuspharma's clinical laboratory and personnel as well as potential cost reductions created by eliminating redundant expenses of the companies.

Table of Contents

The financial presentation of SG Cowen, including its opinion to the effect that, as of the date of the opinion, and based upon and subject to the assumptions, qualifications and limitations set forth in its opinion, the exchange ratio provided for in the merger agreement was fair, from a financial point of view, to Novuspharma's shareholders.

The merger agreement restricts CTI's ability to solicit offers from potential acquirers of 50% or more of CTI's stock or assets and, if CTI were to do so, or if CTI were to terminate the merger agreement without an appropriate reason (or if its actions were to cause Novuspharma to terminate for an appropriate reason), all as described under "The Merger Agreement Termination Fee," CTI might be required to pay Novuspharma a \$4.75 million termination fee.

The board of directors of Novuspharma also identified and considered the following potentially negative material factors in its deliberations concerning the merger:

Substantial management time and effort will be required to negotiate and close the transaction.

The merger will subject the combined company to new risks, including those risks listed above under the caption "Risk Factors - Risks Related to the Merger."

Significant legal, financial advisor and accounting fees will be incurred in connection with closing the transaction, which are currently estimated to total approximately \$8.5 million for the combined company.

The possibility that if the market price of CTI common stock declines, as a result of the fixed nature of the exchange ratio, the value of the merger consideration to be received by the Novuspharma shareholders at the time of the closing of the merger would decline.

The possibility of disruption to the operations of Novuspharma and a loss of key employees as a result of the merger.

The possibility that the benefits anticipated in connection with the merger might not be realized by the combined company.

Significant costs may be incurred in connection with the integration of the businesses of CTI and Novuspharma and the integration will be challenging, which may be exacerbated by the geographic separation of the companies.

The merger agreement restricts Novuspharma's ability to solicit offers from potential acquirers of 20% or more of its stock or assets and, if Novuspharma were to do so, or if Novuspharma were to terminate the merger agreement without an appropriate reason (or if Novuspharma's actions were to cause CTI to terminate for an appropriate reason), all as described in "The Merger Agreement Termination Fee," Novuspharma might be required to pay CTI a \$4.75 million termination fee.

The merger may have a negative impact on Novuspharma's collaborators and employees.

The investment community might respond negatively to the proposed transaction.

The other risks associated with the transaction described under "Risk Factors."

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The Novuspharma board of directors did not find it necessary to, and did not quantify or otherwise assign relative weights to, the foregoing factors or determine that any factor was of particular importance. Rather, the Novuspharma board of directors views its recommendation as being based on the totality of the information presented to, and considered by, it. The Novuspharma board of directors

Table of Contents

considered all these factors and determined that these factors, as a whole, supported the conclusions and recommendations described above.

Opinion of CTI's Financial Advisor

CTI engaged CIBC World Markets to act as its exclusive financial advisor in connection with the merger. In connection with this engagement, the CTI board of directors requested that CIBC World Markets evaluate the fairness, from a financial point of view, to CTI of the exchange ratio. On June 16, 2003, at a meeting of the CTI board of directors held to evaluate the proposed merger, CIBC World Markets rendered an oral opinion, which was confirmed by delivery of a written opinion dated the same date, to the effect that, as of that date and based on and subject to the matters described in its opinion, the exchange ratio was fair, from a financial point of view, to CTI.

The full text of CIBC World Markets' written opinion dated June 16, 2003, which describes the assumptions made, procedures followed, matters considered and limitations on the review undertaken, is attached to this proxy statement/prospectus as *Appendix G*. **CIBC World Markets opinion is addressed to the CTI board of directors and relates only to the fairness, from a financial point of view, to CTI of the exchange ratio. The opinion does not address any other aspect of the merger and does not constitute a recommendation to any shareholder with respect to any matters relating to the merger. The summary of CIBC World Markets' opinion described below is qualified in its entirety by reference to the full text of the written opinion. You are encouraged to read the opinion carefully in its entirety.**

In arriving at its opinion, CIBC World Markets:

reviewed the merger agreement;

reviewed audited financial statements of CTI and Novuspharma for the fiscal years ended December 31, 2000, December 31, 2001 and December 31, 2002;

reviewed unaudited financial statements of CTI and Novuspharma for the quarterly period ended March 31, 2003;

reviewed financial forecasts relating to CTI and Novuspharma provided to or discussed with CIBC World Markets by the managements of CTI and Novuspharma, including adjustments to the financial forecasts relating to Novuspharma prepared by the management of CTI and estimates as to the potential synergies and strategic benefits anticipated by the managements of CTI and Novuspharma to result from the merger;

reviewed historical market prices and trading volume for CTI common stock and Novuspharma ordinary shares;

held discussions with the senior managements of CTI and Novuspharma with respect to the businesses and prospects of CTI and Novuspharma;

reviewed and analyzed certain publicly available financial data for companies that CIBC World Markets deemed comparable to CTI and Novuspharma;

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reviewed and analyzed certain publicly available information for transactions that CIBC World Markets deemed relevant in evaluating the merger;

reviewed the premiums paid, based on publicly available information, in transactions that CIBC World Markets deemed relevant in evaluating the merger;

Table of Contents

analyzed the estimated present value of the future trading price of CTI and Novuspharma using financial forecasts, including assumptions of future performance contained in those forecasts, provided to or discussed with CIBC World Markets by the managements of CTI and Novuspharma;

reviewed potential pro forma financial effects of the merger on CTI based on financial forecasts provided to or discussed with CIBC World Markets by the managements of CTI and Novuspharma;

reviewed public information concerning CTI and Novuspharma; and

performed such other analyses and reviewed such other information as CIBC World Markets deemed appropriate.

In rendering its opinion, CIBC World Markets relied on and assumed, without independent verification or investigation, the accuracy and completeness of all of the financial and other information provided to or discussed with it by CTI, Novuspharma and their employees, representatives and affiliates. With respect to the financial forecasts relating to CTI and Novuspharma, CIBC World Markets assumed at the direction of the managements of CTI and Novuspharma, without independent verification or investigation, that such forecasts, including adjustments to the financial forecasts relating to Novuspharma prepared by the management of CTI and estimates as to the potential synergies and strategic benefits anticipated by the managements of CTI and Novuspharma to result from the merger, were reasonably prepared on bases reflecting the best available information, estimates and judgments of the managements of CTI and Novuspharma as to the future financial condition and operating results of CTI and Novuspharma and the potential synergies and strategic benefits, including the amount, timing and achievability of those synergies and benefits, anticipated to result from the merger.

CIBC World Markets relied at the direction of the managements of CTI and Novuspharma, without independent verification or investigation, on the assessments of the managements of CTI and Novuspharma as to the existing and future technology and product candidates of CTI and Novuspharma and risks associated with such technology and product candidates as well as on the assessments of the managements of CTI and Novuspharma and, with CTI's consent, on published statistics of the Food and Drug Administration regarding the likelihood of approval for product candidates in various stages of development. CIBC World Markets assumed, with CTI's consent, that the merger would not be a taxable transaction to CTI for U.S. federal income tax purposes. CIBC World Markets also assumed, with CTI's consent, that the merger would be consummated in accordance with its terms without waiver, modification or amendment of any material term, condition or agreement and that, in the course of obtaining the necessary regulatory or third party consents and approvals for the merger, no limitations, restrictions or conditions would be imposed that would have an adverse effect on CTI, Novuspharma or the contemplated benefits of the merger.

CIBC World Markets neither made nor obtained any independent evaluations or appraisals of the assets or liabilities, contingent or otherwise, of CTI or Novuspharma. CIBC World Markets expressed no opinion as to the underlying valuation, future performance or long-term viability of CTI or Novuspharma, or the price at which CTI common stock would trade at any time. CIBC World Markets expressed no view as to, and its opinion does not address, the underlying business decision of CTI to effect the merger and its opinion also does not address the relative merits of the merger as compared to any alternative business strategies that might exist for CTI or the effect of any other transaction in which CTI might engage. CIBC World Markets' opinion was necessarily based on the information

Table of Contents

available to CIBC World Markets and general economic, financial and stock market conditions and circumstances as they existed and could be evaluated by CIBC World Markets on the date of its opinion. Although subsequent developments may affect its opinion, CIBC World Markets does not have any obligation to update, revise or reaffirm its opinion.

This summary is not a complete description of CIBC World Markets' opinion to the CTI board of directors or the financial analyses performed and factors considered by CIBC World Markets in connection with its opinion. The preparation of a fairness opinion is a complex analytical process involving various determinations as to the most appropriate and relevant methods of financial analysis and the application of those methods to the particular circumstances and, therefore, a fairness opinion is not readily susceptible to summary description. CIBC World Markets believes that its analyses and this summary must be considered as a whole and that selecting portions of its analyses and factors or focusing on information presented in tabular format, without considering all analyses and factors or the narrative description of the analyses, could create a misleading or incomplete view of the processes underlying CIBC World Markets' analyses and opinion.

In performing its analyses, CIBC World Markets considered industry performance, general business, economic, market and financial conditions and other matters existing as of the date of its opinion, many of which are beyond the control of CTI and Novuspharma. No company, transaction or business used in the analyses as a comparison is identical to CTI, Novuspharma or the merger, and an evaluation of the results of those analyses is not entirely mathematical. Rather, the analyses involve complex considerations and judgments concerning financial and operating characteristics and other factors that could affect the acquisition, public trading or other values of the companies, business segments or transactions analyzed.

The estimates contained in CIBC World Markets' analyses and the ranges of valuations resulting from any particular analysis are not necessarily indicative of actual values or future results, which may be significantly more or less favorable than those suggested by its analyses. In addition, analyses relating to the value of businesses or securities do not purport to be appraisals or to reflect the prices at which businesses or securities actually may be sold. Accordingly, CIBC World Markets' analyses and estimates are inherently subject to substantial uncertainty.

The type and amount of consideration payable in the merger was determined through arm's length negotiations between CTI and Novuspharma and the decision to enter into the merger was solely that of the CTI board of directors. CIBC World Markets' opinion and financial analyses were only one of many factors considered by the CTI board of directors in its evaluation of the merger and should not be viewed as determinative of the views of the CTI board of directors or management with respect to the merger or the exchange ratio.

The following is a summary of the material financial analyses underlying CIBC World Markets' opinion dated June 16, 2003 to the CTI board of directors with respect to the merger. **The financial analyses summarized below include information presented in tabular format. In order to fully understand CIBC World Markets' financial analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data in the tables below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of CIBC World Markets' financial analyses.**

Table of Contents**Novuspharma Analyses**

Selected Companies Analysis. CIBC World Markets compared financial and stock market information for Novuspharma and the following five selected publicly held development stage companies in the biotechnology industry:

Atrix Laboratories, Inc.
 Genta Incorporated
 ILEX Oncology, Inc.
 Inex Pharmaceuticals Corporation
 MGI Pharma Inc.

CIBC World Markets reviewed firm values, calculated as equity market value plus debt, minority interests, preferred stock and out-of-the-money convertible securities, less cash and investments in unconsolidated affiliates, of the selected companies as a multiple of, among other things, calendar year 2005 estimated revenue. All multiples were based on closing stock prices on June 16, 2003. Estimated financial data for the selected companies were based on publicly available research analysts' estimates. Estimated financial data for Novuspharma were based on internal estimates of Novuspharma's management as adjusted by CTI's management. Given the stage of development for product candidates of the selected companies relative to Novuspharma's product candidate, Pixantrone, CIBC World Markets applied a range of selected multiples of calendar year 2005 estimated revenue derived from the selected companies to Novuspharma's calendar year 2007 estimated revenue discounted back two years by applying a discount rate of 40%. This analysis indicated the following approximate implied per share equity reference range for Novuspharma, as compared to the per share equity value implied for Novuspharma based on the exchange ratio and the closing price of CTI common stock on June 16, 2003:

Implied Per Share	Per Share Value Implied for
Equity Reference Range for Novuspharma	Novuspharma by Merger Exchange Ratio
\$38.92 - \$44.08	\$36.14

Precedent Transactions Analysis. CIBC World Markets reviewed the firm values and implied transaction multiples in the following three selected transactions in the biotechnology industry:

Acquiror	Target
OSI Pharmaceuticals, Inc.	Cell Pathways, Inc.
Cephalon, Inc.	Anesta Corp.
Baxter International Inc.	North American Vaccine, Inc.

CIBC World Markets reviewed firm values as a multiple of, among other things, two-years forward estimated revenue. All multiples for the selected transactions were based on publicly available information. CIBC World Markets applied a range of selected multiples of two-years forward estimated revenue derived from the selected transactions to Novuspharma's calendar year 2007 estimated revenue discounted back three years by applying a discount rate of 40%. This analysis indicated the following approximate implied per share equity reference range for Novuspharma, as compared to the per share equity value implied for Novuspharma based on the exchange ratio and the closing price of CTI common stock on June 16, 2003:

Implied Per Share	Per Share Value Implied for
Equity Reference Range for Novuspharma	Novuspharma by Merger Exchange Ratio
\$35.81 \$40.29	\$36.14

Table of Contents

Premiums Paid Analysis. CIBC World Markets reviewed the premiums paid in eight selected merger and acquisition transactions in the biotechnology industry, and five selected merger and acquisition transactions involving Italian companies, announced since January 2001 having transaction values between \$50 million and \$250 million. CIBC World Markets applied a range of selected premiums derived from these transactions based on the closing stock price of the target company one day prior to public announcement of the transaction to the closing price of Novuspharma ordinary shares on June 16, 2003. This analysis indicated the following approximate implied per share equity reference range for Novuspharma, as compared to the per share equity value implied for Novuspharma based on the exchange ratio and the closing price of CTI common stock on June 16, 2003:

Implied Per Share	Per Share Value Implied for
Equity Reference Range for Novuspharma	Novuspharma by Merger Exchange Ratio
\$33.48 \$40.17	\$36.14

Discounted Earnings Per Share Analysis. CIBC World Markets performed a discounted earnings per share analysis of Novuspharma to calculate the estimated present value of hypothetical prices at which Novuspharma ordinary shares could trade in calendar year 2008. Estimated financial data for Novuspharma were based on internal estimates prepared by Novuspharma's management as adjusted by CTI's management taking into account, among other things, the assessments of the managements of CTI and Novuspharma as to the probability that particular product candidates being developed by Novuspharma would be commercialized, published statistics of the Food and Drug Administration regarding the likelihood of approval for product candidates in various stages of development, and the net income margins of selected commercial stage companies in the biotechnology industry. CIBC World Markets calculated a range of implied hypothetical future trading prices for Novuspharma ordinary shares by applying earnings per share, commonly referred to as EPS, multiples of 35.0x to 40.0x to Novuspharma's calendar year 2008 estimated EPS. The present value of the implied hypothetical future trading prices was calculated using a discount rate of 15%. This analysis indicated the following approximate implied per share equity reference range for Novuspharma, as compared to the per share equity value implied for Novuspharma based on the exchange ratio and the closing price of CTI common stock on June 16, 2003:

Implied Per Share	Per Share Value Implied for
Equity Reference Range for Novuspharma	Novuspharma by Merger Exchange Ratio
\$31.30 \$35.77	\$36.14

Table of Contents**CTI Analyses**

Selected Companies Analysis. CIBC World Markets compared financial and stock market information for CTI and the following five selected publicly held development stage companies in the biotechnology industry:

Atrix Laboratories, Inc.
 Genta Incorporated
 ILEX Oncology, Inc.
 Inex Pharmaceuticals Corporation
 MGI Pharma Inc.

CIBC World Markets reviewed firm values of the selected companies as a multiple of, among other things, calendar year 2005 estimated revenue. All multiples were based on closing stock prices on June 16, 2003. Estimated financial data for the selected companies were based on publicly available research analysts' estimates. Estimated financial data for CTI were based on internal estimates of CTI's management. CIBC World Markets applied a range of selected multiples of calendar year 2005 estimated revenue derived from the selected companies to CTI's calendar year 2005 estimated commercial sales of XYOTAX. This analysis indicated the following approximate implied per share equity reference range for CTI, as compared to the per share closing price of CTI common stock on June 16, 2003:

Implied Per Share	Per Share Closing Price of
Equity Reference Range for CTI	CTI Common Stock on June 16, 2003
\$16.41 - \$19.17	\$14.75

Discounted Earnings Per Share Analysis. CIBC World Markets performed a discounted earnings per share analysis of CTI to calculate the estimated present value of hypothetical prices at which CTI common stock could trade in calendar year 2006. Estimated financial data for CTI were based on internal estimates prepared by CTI's management taking into account, among other things, the assessments of the management of CTI as to the probability that particular product candidates being developed by CTI would be commercialized, published statistics of the Food and Drug Administration regarding the likelihood of approval for product candidates in various stages of development, and the net income margins of selected commercial stage companies in the biotechnology industry. CIBC World Markets calculated a range of implied hypothetical future trading prices for CTI common stock by applying earnings per share multiples of 35.0x to 40.0x to CTI's calendar year 2006 estimated EPS. The present value of the implied hypothetical future trading prices was calculated using a discount rate of 15%. This analysis indicated the following approximate implied per share equity reference range for CTI, as compared to the per share closing price of CTI common stock on June 16, 2003:

Implied Per Share	Per Share Closing Price of
Equity Reference Range for CTI	CTI Common Stock on June 16, 2003
\$13.52 - \$15.45	\$14.75

Implied Exchange Ratio Analysis

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Using the implied per share equity reference ranges derived for Novuspharma from the Selected Companies Analysis, Precedent Transactions Analysis, Premiums Paid Analysis and Discounted Earnings Per Share Analysis described above under Novuspharma Analyses and the implied per share equity reference ranges derived for CTI from the Selected Companies Analysis and

Table of Contents

Discounted Earnings Per Share Analysis described above under CTI Analyses, as well as the per share closing price of CTI common stock on June 16, 2003, CIBC World Markets calculated implied exchange ratio reference ranges for CTI common stock and Novuspharma ordinary shares. This analysis indicated the following approximate implied exchange ratio reference ranges, as compared to the exchange ratio provided for in the merger:

	Implied Exchange	
	Ratio Reference Range	
	<hr/>	
Novuspharma Selected Companies Analysis/CTI Selected Companies Analysis	2.03	2.69
Novuspharma Precedent Transactions Analysis/CTI Selected Companies Analysis	1.87	2.46
Novuspharma Premiums Paid Analysis/CTI Per Share Common Stock Price	2.27	2.72
Novuspharma Discounted Earnings Per Share Analysis/CTI Discounted Earnings Per Share Analysis	2.03	2.65
Median Implied Exchange Ratio Reference Range	2.03	2.67
Merger Exchange Ratio		2.45

Contribution Analysis

CIBC World Markets compared the relative contributions of CTI and Novuspharma to the combined company's estimated revenue for fiscal years 2003 through 2007. Estimated financial data were based on, in the case of CTI, internal estimates of CTI's management and, in the case of Novuspharma, internal estimates of Novuspharma's management as adjusted by CTI's management. Based on these relative contributions, CIBC World Markets calculated the pro forma enterprise value contributions of CTI and Novuspharma to the combined company. This analysis indicated that, as of June 16, 2003, CTI would constitute approximately 83.2% of the pro forma enterprise value of the combined company, as compared to the mean and median estimated revenue contributions of CTI to the combined company for fiscal years 2003 through 2007 of approximately 88.0% and 91.4%, respectively.

Pro Forma Merger Analysis

CIBC World Markets analyzed the potential pro forma effect of the merger on CTI's estimated EPS in calendar years 2003 through 2007 after giving effect to potential synergies anticipated by the managements of CTI and Novuspharma to result from the merger. Estimated financial data were based on, in the case of CTI, internal estimates of CTI's management and, in the case of Novuspharma, internal estimates of Novuspharma's management as adjusted by CTI's management. This analysis did not result in meaningful results for calendar years 2003 through 2005 due to estimated losses for both companies in those years and indicated that the merger could be dilutive to CTI's estimated EPS in calendar years 2006 and 2007. The actual results achieved by the combined company may vary from projected results and the variations may be material.

Other Factors

In rendering its opinion, CIBC World Markets also reviewed and considered other factors, including:

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historical trading prices and trading volumes of CTI common stock and Novuspharma ordinary shares during the 52-week period ended June 16, 2003;

the relationship between movements in CTI common stock, movements in Novuspharma ordinary shares, and movements in the NASDAQ Biotech Index during the 52-week period ended June 16, 2003;

Table of Contents

trading volumes of CTI common stock and Novuspharma ordinary shares at various historical price ranges as a percentage of the public float;

the ratio of the per share closing prices of Novuspharma ordinary shares and CTI common stock calculated daily for the one-year period ended June 16, 2003 and the average of this ratio calculated over various periods ended June 16, 2003; and

selected research analysts' reports for CTI, including stock price and EPS estimates reflected in those reports.

Miscellaneous

CTI selected CIBC World Markets as its exclusive financial advisor in connection with the merger based on CIBC World Markets' reputation, experience and familiarity with CTI and its business. CIBC World Markets is an internationally recognized investment banking firm and, as a customary part of its investment banking business, is regularly engaged in valuations of businesses and securities in connection with acquisitions and mergers, underwritings, secondary distributions of securities, private placements and valuations for other purposes. CIBC World Markets and its affiliates in the past have provided, and currently are providing, services to CTI unrelated to the merger, for which services CIBC World Markets and its affiliates have received and expect to receive compensation. In the ordinary course of business, CIBC World Markets and its affiliates may actively trade the securities of CTI and Novuspharma for their own account and for the accounts of customers and, accordingly, may at any time hold a long or short position in those securities.

CTI has agreed to pay CIBC World Markets an aggregate fee for its financial advisory services in connection with the merger based on the transaction value of the merger. The aggregate fee payable by CTI to CIBC World Markets is currently estimated to be approximately \$1.8 million. In addition, CTI has agreed to reimburse CIBC World Markets for its reasonable out-of-pocket expenses, including reasonable fees and expenses of its legal counsel, and to indemnify CIBC World Markets and related parties against liabilities, including liabilities under federal securities laws, relating to or arising out of its engagement.

Summary of Material Terms of Voting Agreements

Approximately 8.3% of CTI's common shares outstanding as of June 16, 2003 and 60% of Novuspharma's ordinary shares outstanding as of June 16, 2003 are subject to voting agreements in which the holders of the shares agree to vote their shares in favor of the merger, as described below.

CTI Shareholder Voting Agreements

In connection with the execution and delivery of the merger agreement, Novuspharma entered into voting agreements with each of the following CTI officers and directors: James A. Bianco, Louis A. Bianco, Jack L. Bowman, James Canfield, John M. Fluke, Jr., Vartan Gregorian, Edward F. Kenney, Max E. Link, Mary O. Munding, Phillip M. Nudelman, Jack W. Singer and Martin P. Sutter. The following summary describes certain material provisions of the CTI shareholder voting agreements. A complete copy of the form of CTI shareholder voting agreement entered into by officers and directors of CTI is attached as an exhibit to the merger agreement, and is attached to this proxy statement/prospectus as *Appendix B*.

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Transfer and Voting of Shares. Under the CTI shareholder voting agreements, the CTI shareholders agreed that, except as otherwise agreed to by Novuspharma or as specifically

Table of Contents

permitted by the CTI shareholder voting agreements as set forth below, they will not transfer, enter into any agreement or understanding to transfer, or deposit into a voting trust or similar arrangement any of the shares of CTI common stock owned by them and subject to the CTI shareholder voting agreements (totaling 735,726 shares of CTI common stock). However:

the CTI shareholders are permitted to transfer the shares of CTI common stock owned by them and subject to the CTI shareholder voting agreements pursuant to and in accordance with the terms of the CTI shareholder s 10b-5 plan or arrangement with CTI, if any;

the CTI shareholders are permitted to sell the shares of CTI common stock owned by them and subject to the CTI shareholder voting agreements for cash to the extent necessary to pay taxes incurred as a direct result of the exercise of options to purchase CTI common stock; and

the CTI shareholders are permitted to sell the shares of CTI common stock owned by them and subject to the CTI shareholder voting agreements to any person who executes a counterpart of the CTI shareholder voting agreement and agrees in writing to hold the purchased shares subject to the terms and provisions of the CTI shareholder voting agreement.

The foregoing restrictions on transfer terminate upon CTI shareholder approval of the merger proposal.

Agreement to Vote Shares; Grant of Irrevocable Proxy. Under the CTI shareholder voting agreements, the CTI shareholders agreed to vote all of the shares of CTI common stock owned by them and subject to the CTI shareholder voting agreements, as follows:

in favor of the merger and, upon the request of Novuspharma, in favor of any actions required to further the merger, including, without limitation, any proposal to permit CTI to adjourn any shareholder meeting; and

in favor of any other matter requiring the consent of the CTI shareholders and directly relating to the consummation of the transactions contemplated by the merger agreement.

Furthermore, each CTI shareholder agreed to grant Novuspharma an irrevocable proxy to vote the CTI shareholder s shares of CTI common stock accordingly.

Termination. The CTI shareholder voting agreements will terminate upon the earlier to occur of the termination of the merger agreement and the consummation of the merger.

In connection with the execution and delivery of the merger agreement, Novuspharma also entered into a CTI shareholder voting agreement with Essex Woodlands Health Ventures Fund IV, L.P., a shareholder of CTI, which owns 2,033,997 shares of CTI common stock. A complete copy of the CTI shareholder voting agreement entered into by Essex Woodlands is attached as an exhibit to the merger agreement, and is attached to this proxy statement/prospectus as *Appendix C*. The material provisions of this agreement are comparable to those of the CTI shareholder voting agreements, except for the following enumerated differences:

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Essex Woodlands Health Ventures Fund IV, L.P. is permitted to sell the shares of CTI common stock owned by it and subject to the CTI shareholder voting agreement only in the following circumstances:

to any person who executes a counterpart of the CTI shareholder voting agreement and agrees in writing to hold the purchased shares subject to the terms and provisions of the CTI shareholder voting agreement; or

Table of Contents

up to 25% of the shares of CTI common stock owned by it and subject to the CTI shareholder voting agreement; and

the restrictions on transfer terminate as to Essex Woodlands Health Ventures Fund IV, L.P. upon the earlier to occur of t