

PROSPECTUS SUPPLEMENT
(TO PROSPECTUS DATED APRIL 17, 2009)

**2,018,153 Shares of Common Stock
Warrants to Purchase 1,009,076 Shares of Common Stock**

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to 2,018,153 shares of our common stock and warrants to purchase up to 1,009,076 shares of our common stock to selected institutional investors under one or more common stock subscription agreements, each dated on or about September 25, 2009, between us and each of the investors. The common stock and warrants will be sold in units, with each unit consisting of one share of common stock and a warrant to purchase 0.5 shares of common stock, at an initial exercise price of \$5.24 per share. Each unit will be sold at a negotiated price of \$3.50 per unit. Units will not be issued or certificated. The shares of common stock and warrants are immediately separable and will be issued separately.

Our common stock is listed on the NASDAQ Global Market under the symbol "CLSN." On September 25, 2009, the last reported sale price of our common stock, as reported on the NASDAQ Global Market, was \$4.77 per share. The warrants are not and will not be listed for trading on the NASDAQ Global Market.

We have retained Needham & Company, LLC to act as the placement agent in connection with this offering. The placement agent is not purchasing or selling any of these securities nor is it required to sell any specific number or dollar amount of securities, but has agreed to use its reasonable best efforts to sell the securities offered by this prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE S-4 OF THIS PROSPECTUS SUPPLEMENT AND PAGE 4 OF THE ACCOMPANYING PROSPECTUS, AS WELL AS THE RISKS DISCUSSED UNDER THE CAPTION "RISK FACTORS" BEGINNING ON PAGE 9 OF OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2008 AND BEGINNING ON PAGE 18 OF OUR QUARTERLY REPORT ON FORM 10-Q FOR THE THREE-MONTH PERIOD ENDED JUNE 30, 2009, EACH OF WHICH IS INCORPORATED BY REFERENCE IN THIS PROSPECTUS SUPPLEMENT.

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

	<u>Per Unit</u>	<u>Aggregate Offering Amount</u>
Public offering price	\$ 3.50	\$ 7,063,535.50
Placement agent's fees	\$.2625	\$ 529,765.16
Proceeds, before expenses	\$ 3.2375	\$ 6,533,770.34

We estimate the total expenses of this offering, excluding the placement agent's fee, will be approximately \$233,500. We are not required to sell any specific number or dollar amount of the units offered in this offering, but the placement agent will use its reasonable best efforts to arrange for the sale of all of the units offered. Pursuant to an escrow agreement among us, the placement agent and an escrow agent, the funds received in payment for the units sold in this offering will be wired to a non-interest bearing escrow account and held until we and the placement agent notify the escrow agent that this offering has closed, indicating the date on which the shares of common stock and the warrants to purchase common stock are to be delivered to the purchasers and the proceeds are to be delivered to us. Delivery of the units is expected to be made on or about September 30, 2009, against payment for such units to be received by us on the same date.

Needham & Company, LLC

The date of this prospectus supplement is September 25, 2009

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT

	<u>Page</u>
About This Prospectus Supplement	S-1
Prospectus Supplement Summary	S-2
Risk Factors	S-4
Cautionary Statement Regarding Forward-Looking Statements	S-5
Use of Proceeds	S-6
Determination of Offering Price	S-6
Description of Securities We Are Offering	S-6
Capitalization	S-8
Dilution	S-9

PROSPECTUS

	<u>Page</u>
About This Prospectus	(ii)
Prospectus Summary	1
Risk Factors	4
Forward-Looking Statements	5
Use of Proceeds	6
Description of Capital Stock	7
Description of Warrants	12
Description of Rights	14
Description of Units	15
Plan of Distribution	17
Legal Matters	19
Experts	19
Where You Can Find More Information	19

[Table of Contents](#)

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of the securities we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or the SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

In this prospectus supplement, unless we indicate otherwise, “we,” “us,” “our” and “Company” refer to Celsion Corporation.

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed on April 3, 2009, with the SEC using a “shelf” registration process with respect to \$50,000,000 in securities that may be sold thereunder. The shelf registration statement was declared effective by the SEC on April 17, 2009.

Under the shelf registration process, we may offer and sell any combination of securities described in the accompanying prospectus in one or more offerings. The accompanying prospectus provides you with a general description of the securities we may offer. Each time we use the accompanying prospectus to offer securities, we will provide a prospectus supplement that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in the prospectus. The purpose of this prospectus supplement is to provide supplemental information regarding us in connection with this offering of common stock.

You should read this prospectus supplement, along with the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus carefully before you invest. Both documents contain important information you should consider when making your investment decision.

You may rely only on the information contained in this prospectus supplement and the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide information or to make representations that are different. Neither this prospectus supplement nor the accompanying prospectus is an offer to sell or a solicitation of an offer to buy any securities other than those registered by this prospectus, nor is it an offer to sell or a solicitation of an offer to buy securities where an offer or solicitation would be unlawful. Neither the delivery of this prospectus supplement and the accompanying prospectus, nor any sale made under this prospectus supplement nor the accompanying prospectus, means that the information contained in this prospectus supplement is correct as of any time after the date of this prospectus supplement and the accompanying prospectus.

[Table of Contents](#)

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information appearing elsewhere in this prospectus supplement and in the accompanying prospectus and in the documents we incorporate by reference. After you read this summary, you should read and consider carefully the more detailed information and financial statements and related notes that we include in and/or incorporate by reference into this prospectus supplement and the accompanying prospectus, especially the sections entitled “Risk Factors.” If you invest in our securities, you are assuming a high degree of risk.

Our Company

We are an innovative oncology drug development company focused on improving treatment for those suffering with highly aggressive and difficult to treat forms of cancer. We are working to develop and commercialize more efficient, effective, targeted chemotherapeutic oncology drugs based on our proprietary heat-activated liposomal technology. The promise of this drug technology is to maximize efficacy while minimizing side-effects common to cancer treatments.

Our lead product ThermoDox® is being evaluated in a Phase III clinical trial for primary liver cancer and a Phase II study for recurrent chest wall breast cancer. ThermoDox® is a liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. Localized mild hyperthermia (40-42 degrees Celsius) releases the entrapped doxorubicin from the liposome enabling high concentrations of doxorubicin to be deposited preferentially in a targeted tumor.

We also are developing a product pipeline of cancer drugs that employ our heat activated liposomal technology. We are developing a liposomal formulation of docetaxel and plan to develop a number of other liposomal formulations for existing chemotherapeutic cancer drugs where we believe that our technology can improve efficacy and safety. We have formed a joint research agreement with Royal Phillips Electronics that is evaluating the combination of Phillips' high intensity focused ultrasound with our heat activated liposomal technology to develop new cancer drugs.

For certain indications, we may seek licensing partners to share in the development and commercialization costs. We also will evaluate licensing cancer products from third parties for cancer treatments to expand our development pipeline.

In December 2008, we entered into a licensing agreement with Yakult Honsha under which Yakult was granted the exclusive right to commercialize and market ThermoDox® for the Japanese market. We received a \$2.5 million up-front licensing fee and we may receive an additional \$18 million upon receipt of marketing approval by the Japanese Ministry of Health, Labor and Welfare. We also may receive additional milestone payments tied to the achievement of certain levels of sales and approval for new indications. We will receive double digit escalating royalties on the sale of ThermoDox® in Japan, if and when any such sales occur. We also will be the exclusive supplier of ThermoDox® to Yakult.

In 2005, the Company made a strategic decision to divest its medical device business. The Company sold this business to Boston Scientific Corporation, or Boston Scientific, for approximately \$60 million in June 2007. In 2008, the Company collected a \$15 million installment payment from the sale of these assets and received a final payment of \$14.9 million from Boston Scientific in June 2009. The results of operations for the medical device business for the year ended December 31, 2007 have been reclassified as a discontinued operation.

Corporate Information

We were founded in 1982 and are a Delaware corporation. Our principal executive offices are located at 10220-L Old Columbia Road, Columbia, Maryland 21046. Our telephone number is (410) 290-5390 and our website is www.celsion.com. The information available on or through our websites is not a part of this prospectus supplement and should not be relied upon.

S-2

[Table of Contents](#)

The Offering

Common stock offered by us	2,018,153 shares directly 1,009,076 shares issuable upon the exercise of warrants
Warrants	Warrants to purchase up to 1,009,076 shares of common stock will be offered in this offering. The warrants will be exercisable at an initial exercise price of \$5.24 per share. The warrants are exercisable at any time on or after the six month anniversary of the date of issuance and expire on the sixty-six month anniversary of issuance. This prospectus also relates to the offering of the shares of common issuable upon exercise of the warrants.
Common stock outstanding before this offering (1)	10,095,814 shares
Common stock to be outstanding after this offering (1)	12,113,967 shares
Price per unit	\$3.50
Use of proceeds	We currently intend to use the net proceeds from the sale of the units and pursuant to this offering for general corporate purposes, including the funding of the clinical development of our product pipeline of cancer drugs.
Risk Factors	You should carefully consider, in addition to the other information contained in or incorporated by reference into this prospectus supplement, the specific risks set forth under the caption "Risk Factors" section beginning on page S-4 of this prospectus supplement and page 4 of the accompanying prospectus, as well as the risks discussed under the caption "Risk Factors" beginning on page 9 of our Annual Report on Form 10-K for the year ended December 31, 2008 and beginning on page 18 of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, each of which is incorporated by reference in this prospectus supplement.
NASDAQ Capital Market symbol	"CLSN"

- (1) Assumes 10,095,814 shares of common stock outstanding as of September 23, 2009 and excludes an aggregate of 1,775,414 shares of common stock subject to outstanding options, restricted stock awards and warrants, and 956,544 shares of common stock reserved for issuance under our equity incentive plans.

[Table of Contents](#)

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before purchasing our securities, you should carefully review and consider the risk factors described below, the risk factors beginning on page 4 of the accompanying prospectus, as well as the risks discussed under the caption “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2008, and in our Quarterly Report on Form 10-Q for the three-month period ended June 30, 2009, each of which is incorporated by reference into this prospectus supplement. If any of these risks actually occur, our business, financial condition and results of operations would suffer. In that case, the trading price of our common stock would likely decline and you might lose all or part of your investment in our securities. Additional risks not presently known to us or that we currently deem immaterial may also impair our business, financial condition or results of operations. See also the information contained under the heading “Special Note Regarding Forward-Looking Statements” immediately below.

Risks Relating to this Offering and Ownership of Our Common Stock

The market price of our common stock may be volatile, and the value of your investment could decline significantly.

The trading price for our common stock has been, and we expect it to continue to be, volatile. The price at which our common stock trades depends upon a number of factors, including our historical and anticipated operating results, our financial situation, announcements of technological innovations or new products by us or our competitors, our ability or inability to raise the additional capital we may need and the terms on which we raise it, and general market and economic conditions, some of which are beyond our control. These broad market fluctuations may lower the market price of our common stock and affect the volume of trading in our stock.

Future sales of our common stock in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. As of September 23, 2009, we had 10,095,814 shares of common stock outstanding, all of which shares, other than shares held by our directors and certain officers which are subject to ninety (90) day lock-up agreements in connection with this offering, were eligible for sale in the public market, subject in some cases to compliance with the requirements of Rule 144, including the volume limitations and manner of sale requirements. In addition, all of the shares offered under this prospectus supplement and the accompanying prospectus will be freely tradable without restriction or further registration upon issuance.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways with which you may not agree. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that the proceeds will be invested or otherwise used in a way that does not yield a favorable, or any, return for our company.

We have never declared or paid dividends on our capital stock and we do not anticipate paying dividends in the foreseeable future.

Our business requires significant funding, and we currently invest available funds and earnings in product development. Therefore, we do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently plan to invest all available funds and future earnings in the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of potential gain for the foreseeable future.

You will experience immediate dilution in the book value per share of the common stock you purchase.

You will suffer immediate dilution in the net tangible book value of the common stock you purchase in this

[Table of Contents](#)

offering because the price per share of our common stock being offered hereby is substantially higher than the book value per share of our common stock. Based on the public offering price of \$3.50 per unit in this offering (and attributing no value to the warrant included in each unit), if you purchase units in this offering, you will suffer immediate and substantial dilution of \$1.64 per share in the net tangible book value of the common stock. See “Dilution” on page S-9 for a more detailed discussion of the dilution you will incur in this offering.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this prospectus, in any applicable prospectus supplement and in any related free writing prospectus, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and releases issued by the SEC and within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In addition, from time to time we may publish forward-looking statements relating to such matters as anticipated financial performance, business prospects, technological developments, new products, research and development activities and other aspects of our present

and future business operations and similar matters that also constitute such forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Such factors include, among other things:

- unforeseen changes in the course of research and development activities and in clinical trials;
- possible changes in cost and timing of development and testing, capital structure, and other financial items;
- changes in approaches to medical treatment;
- introduction of new products by others;
- possible acquisitions of other technologies, assets or businesses;
- possible actions by customers, suppliers, strategic partners, potential strategic partners, competitors and regulatory authorities; and
- those listed under the header "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under the same and similar headings in the other documents that are incorporated by reference into this prospectus.

In some cases, you can identify forward-looking statements by terminology such as "expect," "anticipate," "estimate," "plan," "believe," "could," "intend," "predict," "may," "will," "should," "will" and words of similar import regarding the Company's expectations. Forward-looking statements are only predictions and actual events or results may differ materially. Although we believe that our expectations are based on reasonable assumptions within the bounds of our current knowledge of our industry, business and operations, we cannot guarantee that actual results will not differ materially from our expectations. In evaluating such forward-looking statements, you should specifically consider various factors, including the risks outlined under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. The discussion of risks and uncertainties set forth in those filings is not necessarily a complete or exhaustive list of all risks facing the Company at any particular point in time. We operate in a highly competitive, highly regulated and rapidly changing environment, and our business is in a state of evolution. Therefore, it is likely that new risks will emerge, and that the nature and elements of existing risks will change, over time. It is not possible for management to predict all such risk factors or changes therein, or to assess either the impact of all such risk factors on our business or the extent to which any individual risk factor, combination of factors, or new or altered factors, may cause results to differ materially from those contained in any forward-looking statement. Also, these forward-looking statements represent our estimates and assumptions only as of the date such

[Table of Contents](#)

forward-looking statements are made. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the section entitled "Where You Can Find Additional Information," and with the understanding that our actual future results may be materially different from what we expect.

Except as required by law, forward-looking statements speak only as of the date they are made, and we assume no obligation to update any forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in any forward-looking statements, even if new information becomes available.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of the securities offered pursuant to this prospectus supplement will be approximately \$6.3 million, after deducting the placement agent's fees and all estimated offering expenses that are payable by us. We currently intend to use the net proceeds from the sale of the securities pursuant to this offering for general corporate purposes, including the funding of the clinical development of our product pipeline of cancer drugs.

Pending the application of the net proceeds, we intend to invest the net proceeds in short-term, investment grade, interest-bearing securities.

DETERMINATION OF OFFERING PRICE

We determined the offering price of the securities being offered by this prospectus supplement principally by negotiations between us and the selected investors and our consideration of the closing prices (including high, low and average prices) and trading volumes of our common stock on the NASDAQ Global Market primarily during the 30 trading days preceding the date we determined the offering price. No independent appraisal or valuation was obtained to determine the offering price. The offering price of the units reflects a discount of approximately 26.6% from the reported closing price per share of our common stock of \$4.77 on September 25, 2009.

DESCRIPTION OF SECURITIES WE ARE OFFERING

In this offering, we are offering a maximum of 2,018,153 units, consisting of 2,018,153 shares of our common stock and warrants to purchase up to 1,009,076 shares of our common stock. Each unit consists of one share of common stock and a warrant to purchase 0.5 shares of common stock at an initial exercise price of \$5.24 per share. Each unit will be sold at a negotiated price of \$3.50 per unit. This prospectus supplement also relates to the offering of shares of our common stock upon exercise, if any, of the warrants. Units will not be issued or certificated. The shares of common stock and warrants are immediately separable and will be issued separately.

The units offered in this offering will be issued pursuant to subscription agreements between each of the purchasers and us. You should review a copy of the form of subscription agreement and the form of warrant, each of which have been filed by us as an exhibit to a Current Report on Form 8-K filed with the SEC in connection with this offering, for a complete description of the terms and conditions applicable to the units. This description of the units in this prospectus supplement is qualified in its entirety by reference to the warrants.

Common Stock

As of July 1, 2009, our authorized capital stock consists of 75,000,000 shares of common stock, \$0.01 par value per share, and 100,000 shares of preferred stock, \$0.01 par value per share, of which 15,000 shares of Series C Junior Participating Preferred Stock were reserved for issuance under our stockholder rights plan. A description of our stockholder rights plan and all other rights, privileges and preferences of our common stock we are offering pursuant to this prospectus supplement is set forth under the heading "Description of Capital Stock," starting on page 8 of the accompanying prospectus.

S-6

[Table of Contents](#)

Warrants

The following is a brief summary of the warrants and is subject in all respects to the provisions contained in the warrants, the form of which is attached to this prospectus supplement.

Exercisability. Holders may exercise warrants at any time on or after the six month anniversary of the date of issuance up to 11:59 p.m., New York time, on the date that is 66 months after the date of issuance. The warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise discussed below). The holder of warrants does not have the right to exercise any portion of the warrant if the holder would beneficially own in excess of 4.99% of the shares of our common stock outstanding immediately after giving effect to such exercise. This percentage may, however, be raised or lowered to an amount not to exceed 9.99% at the option of the holder upon at least 61 days' prior notice from the holder to us.

Cashless Exercise. At any time when a registration statement covering the resale of the shares of common stock issuable upon exercise of the warrants is not effective, the holder may, at its option, exercise its warrants on a cashless basis. When exercised on a cashless basis, a portion of the warrant is cancelled in payment of the purchase price payable in respect of the number of shares of our common stock purchasable upon such exercise.

Exercise Price. The exercise price of common stock purchasable upon exercise of the warrants is \$5.24 per share. The exercise price and the number of shares issuable upon exercise of the warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications or similar events affecting our common stock, and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Transferability. The warrants may be transferred at the option of the holder upon surrender of the warrants with the appropriate instruments of transfer.

Purchase Rights, Fundamental Transactions and Change of Control. If we sell or grant any rights to purchase stock, warrants or securities or other property to our stockholders on a pro rata basis, we will provide the holders of warrants with the right to acquire, upon the same terms, the securities subject to such purchase rights as though the warrant had been exercised immediately prior to the declaration of such rights. If we consummate any fundamental transaction, as described in the warrants and generally including any consolidation or merger into another corporation, the consummation of a transaction whereby another entity acquires more than 50% of our outstanding common stock, the sale of all or substantially all of our assets, or another transaction in which our common stock is converted into or exchanged for other securities or other consideration, the holder of warrants will thereafter receive upon exercise of the warrants the securities or other consideration to which a holder of the number of shares of common stock then deliverable upon the exercise or conversion of such warrants would have been entitled upon such consolidation, merger or other transaction. In addition, in the event of a fundamental transaction that constitutes a change of control as defined in the warrants, we or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 90 days following the consummation of the transaction, an amount of cash equal to the value of the unexercised warrants held by such holder as determined in accordance with the Black-Scholes option pricing formula.

Exchange Listing. We do not plan on making an application to list the warrants on the NASDAQ Global Market, any national securities exchange or other nationally recognized trading system. Our common stock underlying the warrants is listed on the NASDAQ Global Market.

Rights as Stockholder. Except as otherwise provided in the warrants (such as the rights described above of a warrant holder upon our sale or grant of any rights to purchase stock, warrants or securities or other property to our stockholders on a pro rata basis) or by virtue of such holder's ownership of shares of our common stock, the holders of the warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Fractional Shares. No fractional shares of common stock will be issued upon the exercise of the warrants. Rather, the number of shares of common stock to be issued will be rounded down to the nearest whole number.

S-7

[Table of Contents](#)

CAPITALIZATION

The following table shows our unaudited capitalization and other data as of June 30, 2009:

- on an actual basis; and
- on a pro forma as adjusted basis to reflect this offering.

This table should be read in conjunction with, and is qualified in its entirety by reference to, our unaudited historical financial statements and the accompanying notes included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, which are incorporated by reference herein.

	June 30, 2009	
	(unaudited)	
	Actual	As Adjusted
Stockholders' equity:		
Common stock, par value \$0.01 per share; 250,000,000 shares authorized; 10,856,008 shares issued; 10,095,814 shares outstanding	108,561	128,743
Additional paid-in capital	89,737,617	96,017,706
Accumulated deficit	(75,132,162)	(75,132,162)
Subtotal	14,714,016	21,014,287
Less: Treasury stock, at cost, 760,274 shares	(3,076,670)	(3,076,670)
Total stockholders' equity	<u>\$ 11,637,346</u>	<u>17,937,617</u>

The information above is based on 10,095,814 shares of our common stock outstanding as of June 30, 2009 and does not include:

- 1,641,980 shares of common stock issuable upon exercise of options outstanding as of June 30, 2009, at a weighted average exercise price of \$3.96 per share;
- 135,100 shares of common stock issuable upon the vesting of outstanding restricted stock awards as of June 30, 2009; and
- 23,334 shares of common stock issuable upon the exercise of warrants outstanding as of June 30, 2009, at a weighted average exercise price of \$9.86 per share.

S-8

[Table of Contents](#)

DILUTION

Our net tangible book value as of June 30, 2009 was approximately \$11.6 million, or \$1.15 per share of common stock. Net tangible book value per share is calculated by subtracting our total liabilities from our total tangible assets, which is total assets less intangible assets, and dividing this amount by the number of shares of common stock outstanding. After giving effect to the sale by us of the 2,018,153 units offered in this offering, at a public offering price of \$3.50 per share (and attributing no value to the warrant included in each unit) and after deducting the placement agent's fees and estimated offering expenses payable by us, our net tangible book value as of June 30, 2009, would have been approximately \$17.9 million, or \$1.48 per share of common stock. This represents an immediate increase in net tangible book value of \$0.33 per share to our existing stockholders and an immediate and substantial dilution of \$1.64 per share to new investors. The following table illustrates this per share dilution:

Offering price per share included in each unit	\$	3.12
Net tangible book value per share as of June 30, 2009	\$	1.15
Increase per share attributable to new investors	\$	0.33
Pro forma net tangible book value per share after this offering	\$	1.48
Pro forma dilution per share to new investors	\$	<u>1.64</u>

The above discussion and table is based on 10,095,814 shares of common stock outstanding as of June 30, 2009, and excludes:

- up to 1,641,980 shares of common stock that may be issued upon the exercise of outstanding options as of June 30, 2009 pursuant to our stock option plans at a weighted-average exercise price of \$3.96 per share;
- up to 135,100 shares of common stock issuable upon the vesting of outstanding restricted stock awards as of June 30, 2009; and
- up to 23,334 shares of common stock issuable upon the exercise of outstanding warrants as of June 30, 2009 at a weighted-average exercise price of \$9.86 per share.

S-9

[Table of Contents](#)

PLAN OF DISTRIBUTION

We are offering the units through a placement agent. Subject to the terms and conditions contained in the placement agency agreement, dated September 25, 2009, Needham & Company, LLC has agreed to act as the placement agent for the sale of up to 2,018,153 units. The placement agent is not purchasing or selling any units by this prospectus supplement or the accompanying prospectus nor is it required to arrange for the purchase or sale of any specific number or dollar amount of units, but has agreed to use its commercially reasonable best efforts to arrange for the sale of all units offered by us to the investors.

The placement agency agreement provides that the obligations of the placement agent and the investors are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of customary legal opinions, letters and certificates.

We will sell the offered units to selected institutional and other investors under one or more common stock subscription agreements entered into between us and each of the investors at the offering price stated on the cover of this prospectus supplement. We currently anticipate that closing of the sale of common stock offered hereby will take place on or about September 30, 2009. Investors will also be informed of the date and manner in which they must transmit the purchase price for their units.

On the scheduled closing date, the following will occur:

- we will receive funds in the amount of the aggregate purchase price for the units we sell;
- we will deliver to each of the investors, through the DWAC system or by book-entry, the shares of common stock being purchased; and
- Needham & Company, LLC will receive the placement agent's fee in accordance with the terms of the placement agency agreement.

In accordance with the terms of the placement agency agreement, we will pay the placement agent an aggregate commission equal to 7.5% of the gross proceeds of the sale of units in the offering. We have also agreed to reimburse the placement agent for certain fees and legal expenses incurred by it in connection with the offering. In no event will the total amount of compensation paid to the placement agent and other securities brokers and dealers upon completion of this offering exceed 8% of the gross proceeds of the offering. The estimated offering expenses payable by us, in addition to the placement agent's fee of \$529,765.16, are approximately \$233,500, which includes legal, accounting and printing costs and various other fees associated with registering and listing the common stock. After deducting certain fees due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$6.3 million.

The placement agent has informed us that it will not engage in over-allotment, stabilizing transactions or syndicate covering transactions in connection with the offering. The placement agent may, from time to time, engage in transactions with and perform services for us in the ordinary course of its business.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act and liabilities arising from breaches of representations and warranties contained in the placement agency agreement. We have also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities.

We, along with our executive officers and directors, have agreed to certain lock-up provisions with regard to future sales of our common stock for a period of ninety (90) days after the offering as set forth in the placement agency agreement.

The placement agency agreement is included as an exhibit to our Current Report on Form 8-K that we will file with the SEC in connection with the consummation of this offering.

S-10

[Table of Contents](#)

The transfer agent for our common stock to be issued in this offering is American Stock Transfer & Trust Company located at 6201 15th Avenue, 2nd Floor, Brooklyn, NY 11219. Its phone number is 800-937-5449.

Our common stock is traded on the NASDAQ Global Market under the symbol "CLSN."

LEGAL MATTERS

Seyfarth Shaw LLP, New York, New York is passing upon the validity of the common stock and the warrants being offered hereby. Proskauer Rose LLP, New York, New York is acting as counsel for the placement agent.

EXPERTS

The financial statements incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 have been so incorporated in reliance on the report of Stegman & Company, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

Federal securities laws require us to file information with the SEC concerning our business and operations. Accordingly, we file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms, including those located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on public reference rooms. Our SEC filings are also available to the public from the SEC's web site at <http://www.sec.gov>.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" certain information we file with them in this prospectus supplement. This means that we can disclose important information to you by referring you to the other information we have filed with the SEC. The information that we incorporate by reference is considered to be part of this prospectus supplement. Information that we file later with the SEC will automatically update and supersede this information. Further, all filings we make under the Exchange prior to the termination of the offering shall be deemed to be incorporated by reference into this prospectus supplement. The following documents filed by us with the SEC and any future filings under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (File No. 001-15911) made prior to the termination of this offering are incorporated by reference:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2008 (including information specifically incorporated by reference into our Form 10-K from our definitive proxy statement on Schedule 14A relating to our annual meeting of stockholders held on May 15, 2009), as filed with the SEC on March 27, 2009;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2009 and June 30, 2009, as filed with the SEC on May 12, 2009 and August 5, 2009, respectively;
- our Current Reports on Form 8-K as filed with the SEC on February 19, 2009, June 2, 2009 and September 28, 2009, and our Amended Current Report on Form 8-K/A as filed with the SEC on February 20, 2009;

- our definitive proxy statement on Schedule 14A, relating to our annual meeting of stockholders held on May 15, 2009, as filed with the SEC on April 2, 2009; and
- the description of our common stock contained in our registration statement on Form 8-A, as filed with the SEC on May 26, 2000, as amended by a Form 8-A/A dated February 7, 2008, and any amendments or reports filed for the purpose of updating such description.

S-11

[Table of Contents](#)

This prospectus supplement may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus supplement. Reports we file with the SEC after the date of this prospectus supplement may also contain information that updates, modifies or is contrary to information in this prospectus supplement or in documents incorporated by reference in this prospectus supplement. Investors should review these reports as they may disclose a change in our business, prospectus, financial condition or other affairs after the date of this prospectus supplement.

Our website is www.celsion.com. Our website contains links to our filings available on the SEC website. We will also provide electronic or paper copies of our filings free of charge upon written or oral request. The information available on or through our websites is not a part of this prospectus supplement and should not be relied upon. You can request a free copy of the above filings or any filings subsequently incorporated by reference into this prospectus supplement by writing or calling us at:

Celsion Corporation
10220-L Old Columbia Road
Columbia, Maryland 21046-2364
Attention: Sean Moran, Chief Financial Officer
(410) 290-5390

S-12

[Table of Contents](#)

PROSPECTUS



\$50,000,000
Common Stock
Preferred Stock
Warrants
Rights
Units

From time to time, we may offer up to \$50,000,000, in one or more series, any combination of the following securities of our company:

- common stock;
- preferred stock;
- warrants to purchase shares of common stock or preferred stock;
- rights to purchase shares of common stock or preferred stock; or
- units comprised of 2 or more of the foregoing securities.

We will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

Our common stock is traded on the NASDAQ Global Market under the symbol "CLSN." The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Global Market or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 4 of this Prospectus, in any applicable prospectus supplement and in any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this

prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

The aggregate market value of our outstanding common equity held by non-affiliates as of March 24, 2009 was approximately \$29.3 million. We have not issued any securities pursuant to Instruction I.B.6. of Form S-3 during the 12 calendar month period that ends on and includes the date hereof.

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

The date of this prospectus is April 17, 2009

[Table of Contents](#)

TABLE OF CONTENTS

	<u>Page</u>
ABOUT THIS PROSPECTUS	(ii)
PROSPECTUS SUMMARY	1
RISK FACTORS	4
FORWARD-LOOKING STATEMENTS	5
USE OF PROCEEDS	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	12
DESCRIPTION OF RIGHTS	14
DESCRIPTION OF UNITS	15
PLAN OF DISTRIBUTION	17
LEGAL MATTERS	19
EXPERTS	19
WHERE YOU CAN FIND ADDITIONAL INFORMATION	19

i

[Table of Contents](#)

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) utilizing a “shelf” registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, and warrants and/or rights to purchase shares of our common or preferred stock, either individually or in units, in one or more offerings, up to a total dollar amount of \$50,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of those securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add, update or change in the prospectus supplement (and in any related free writing prospectus that we may authorize to be provided to you) any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the section entitled “Where You Can Find Additional Information,” in this prospectus before buying any of the securities being offered. **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled “Where You Can Find Additional Information” in this prospectus.

We obtained statistical data, market data and other industry data and forecasts used throughout, or incorporated by reference in, this prospectus from market research, publicly available information and industry publications. Industry publications generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy and completeness of the information. Similarly, while we believe that the statistical data, industry data and forecasts and market research are reliable, we have not independently verified the data, and we do not make any representation as to the accuracy of the information. We have not sought the consent of the sources to refer to their reports appearing or incorporated by reference in this prospectus.

This prospectus and the information incorporated herein by reference includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to “Celsion,” “we,” “our” or similar references mean Celsion Corporation.

[Table of Contents](#)

PROSPECTUS SUMMARY

The following summary highlights selected information contained or incorporated by reference in this prospectus. This summary does not contain all of the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus and any supplement hereto carefully, including the risk factors section as well as the financial statements and the notes to the financial statements incorporated herein by reference.

Our Company

Celsion Corporation (“Celsion” or the “Company” or “we”) is an innovative oncology drug development company focused on improving treatment for those suffering with highly aggressive and difficult to treat forms of cancer. We are working to develop and commercialize more efficient, effective, targeted chemotherapeutic oncology drugs based on our proprietary heat-activated liposomal technology. The promise of this drug technology is to maximize efficacy while minimizing side-effects common to cancer treatments.

Our lead product ThermoDox® is being evaluated in a Phase III clinical trial for primary liver cancer and a Phase II study for recurrent chest wall breast cancer. ThermoDox® is a liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. Localized mild hyperthermia (40-42 degrees Celsius) releases the entrapped doxorubicin from the liposome enabling high concentrations of doxorubicin to be deposited preferentially in a targeted tumor.

Celsion is also developing a product pipeline of cancer drugs that employ its heat activated liposomal technology. We are developing a liposomal formulation of docetaxel and plan to develop a number of other liposomal formulations for existing chemotherapeutic cancer drugs where we believe that our technology can improve efficacy and safety. We have formed a joint research agreement with Royal Phillips Electronics that is evaluating the combination of Phillips’ high intensity focused ultrasound with Celsion’s heat activated liposomal technology to develop new cancer drugs.

For certain indications, the Company may seek licensing partners to share in the development and commercialization costs. The Company will also evaluate licensing cancer products from third parties for cancer treatments to expand its development pipeline.

In December 2008, the Company entered into a licensing agreement with Yakult Honsha under which Yakult was granted the exclusive right to commercialize and market ThermoDox® for the Japanese market. Celsion was paid a \$2.5 million up-front licensing fee and Celsion has the potential to receive an additional \$18 million upon receipt of marketing approval by the Japanese Ministry of Health, Labor and Welfare. Celsion also has the potential to receive additional milestone payments tied to the achievement of certain levels of sales and approval for new indications. Celsion will receive double digit escalating royalties on the sale of ThermoDox® in Japan, if and when any such sales occur. Celsion also will be the exclusive supplier of ThermoDox® to Yakult.

In 2005, the Company made a strategic decision to divest its medical device business. The Company sold this business to Boston Scientific Corporation (“Boston Scientific”) for \$60 million. In 2008, the Company collected a \$15 million installment payment from the sale of these assets and is due to receive the final \$15 million installment payment in June 2009. The results of operations for the medical device business for the year ended December 31, 2007 has been reclassified as a discontinued operation.

Our Executive Offices

Our principal executive offices are located at 10220-L Old Columbia Road, Columbia, Maryland 21046. Our telephone number is (410) 290-5390.

The Securities We May Offer

We may offer shares of our common stock and preferred stock, and warrants and/or rights to purchase shares of our common stock and preferred stock, either individually or in units, with a total value of up to \$50,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at

[Table of Contents](#)

the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate offering price;
- rates and times of payment of dividends, if any;

- redemption, conversion, exercise, exchange or sinking fund terms, if any;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any;
- conversion prices, if any; and
- important United States federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, the holders of our common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of legally available funds. Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any then outstanding shares of preferred stock.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine designations, powers (including voting), privileges, preferences and relative

[Table of Contents](#)

participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series. Convertible preferred stock will be convertible into our common stock or exchangeable for our other securities. Conversion may be mandatory or at the holder's option and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus, we will fix the designations, powers (including voting), privileges, preferences and relative participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock that we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Warrants. We may issue warrants for the purchase of our common stock or preferred stock, in one or more series. We may issue warrants independently or together with common stock or preferred stock, and the warrants may be attached to or separate from these securities. The warrants will be evidenced by warrant certificates issued under one or more warrant agreements, which are contracts between us and an agent for the holders of the warrants.

In this prospectus, we have summarized certain general features of the warrants. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference into the registration statement of which this prospectus is a part, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the series of warrants we are offering before the issuance of the related series of warrants. We urge you to read the prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the applicable series of warrants.

Rights. We may issue rights to purchase our common stock or preferred stock, in one or more series. We may issue rights independently or together with other securities, and the rights may be attached or separate from these securities. In this prospectus, we have summarized certain general features of the rights. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of rights being offered, as well as any agreements that describe the terms of the rights we are offering before the issuance of the related rights.

Units. We may issue, in one or more series, units consisting of our common stock, preferred stock, and/or rights and/or warrants for the purchase of our common stock or preferred stock in any combination. Each series of units will be evidenced by unit certificates that we will issue, and units may be

issued under a unit agreement that we enter into with a unit agent. In this prospectus, we have summarized certain general features of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement and any supplemental agreements, including a form of unit certificate, that describe the terms of the series of units we are offering before the issuance of the related series of units. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of units being offered, as well as the complete unit agreement that contains the terms of the units.

[Table of Contents](#)

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under the same and similar headings in the other documents that are incorporated by reference into this prospectus. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations.

[Table of Contents](#)

FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this prospectus, in any applicable prospectus supplement and in any related free writing prospectus, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and releases issued by the Securities and Exchange Commission and within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended. In addition, from time to time we may publish forward-looking statements relating to such matters as anticipated financial performance, business prospects, technological developments, new products, research and development activities and other aspects of our present and future business operations and similar matters that also constitute such forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that may cause our or our industry’s actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Such factors include, among other things:

- unforeseen changes in the course of research and development activities and in clinical trials;
- possible changes in cost and timing of development and testing, capital structure, and other financial items;
- changes in approaches to medical treatment;
- introduction of new products by others;
- possible acquisitions of other technologies, assets or businesses;
- possible actions by customers, suppliers, strategic partners, potential strategic partners, competitors and regulatory authorities; and
- those listed under the header “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under the same and similar headings in the other documents that are incorporated by reference into this prospectus.

In some cases, you can identify forward-looking statements by terminology such as “expect”, “anticipate”, “estimate”, “plan”, “believe”, “could”, “intend”, “predict”, “may”, “will”, “should”, “will” and words of similar import regarding the Company’s expectations. Forward-looking statements are only predictions and actual events or results may differ materially. Although we believe that our expectations are based on reasonable assumptions within the bounds of our current knowledge of our industry, business and operations, we cannot guarantee that actual results will not differ materially from our expectations. In evaluating such forward-looking statements, you should specifically consider various factors, including the risks outlined under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. The discussion of risks and uncertainties set forth in those filings is not necessarily a complete or exhaustive list of all risks facing the Company at any particular point in time. We operate in a highly competitive, highly regulated and rapidly changing environment, and our business is in a state of evolution. Therefore, it is likely that new risks will emerge, and that the nature and elements of existing risks will change, over time. It is not possible for management to predict all such risk factors or changes therein, or to assess either the impact of all such risk factors on our business or the extent to which any individual risk factor, combination of factors, or new or altered factors, may cause results to differ materially from those contained in any forward-looking statement. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the section entitled “Where You Can Find Additional Information,” and with the understanding that our actual future results may be materially different from what we expect.

Except as required by law, forward-looking statements speak only as of the date they are made, and we assume no obligation to update any forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in any forward-looking statements, even if new information becomes available.

[Table of Contents](#)

USE OF PROCEEDS

We currently intend to use the net proceeds from the sale of the securities offered hereby for general corporate purposes, which may include the further development, manufacture and commercialization of our lead product candidate, ThermoDox®, and to fund research and development of other products, working capital, capital expenditures and other general corporate purposes. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own, as well as for capital expenditures. We have not specifically allocated the proceeds to those purposes as of the date of this prospectus. Pending these uses, we expect to invest the net proceeds in short-term, investment-grade securities. The precise amount and timing of the application of proceeds from the sale of securities will depend on our funding requirements and the availability and cost of other funds at the time of sale. Allocation of proceeds of a particular series of securities, or the principal reason for the offering if no allocation has been made, will be described in the applicable prospectus supplement or in any related free writing prospectus.

6

[Table of Contents](#)

DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 250,000,000 shares of common stock, \$0.01 par value per share, and 100,000 shares of preferred stock, \$0.01 par value per share, of which 15,000 shares of Series C Junior Participating Preferred Stock were reserved for issuance under the Stockholder Rights Plan (described below). As of March 31, 2009, there were 10,156,350 shares of our common stock outstanding and no shares of preferred stock outstanding.

The following summary description of our capital stock is based on the applicable provisions of the Delaware General Corporation Law (the “DGCL”) and on the provisions of our certificate of incorporation, as amended (our “Certificate of Incorporation”), and our bylaws, as amended (our “Bylaws”). This information is qualified entirely by reference to the applicable provisions of the DGCL and our Certificate of Incorporation and Bylaws. For information on how to obtain copies of our Certificate of Incorporation and Bylaws, which are exhibits to the registration statement of which this prospectus is a part, see the section entitled “Where You Can Find Additional Information” in this prospectus.

Common Stock

Holders of common stock to be registered hereunder are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Subject to any preferential rights of any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors of the Company (the “Board”) out of funds legally available therefor. In the event of a dissolution, liquidation or winding-up of the Company, holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities and any preferential rights of any outstanding preferred stock.

Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which may be designated and issued in the future.

The Board is classified into three classes, designated as Class I, Class II and Class III, with each class to be elected for three year terms on a staggered basis. At each annual meeting of stockholders, the directors elected to succeed those whose terms are expiring succeed to the same class as the directors they replace and each such new director is elected for a term to expire at the third annual meeting of stockholders after his or her election and when his or her successor is duly elected and qualified.

Holders of common stock have rights under the Rights Agreement described below under the caption “Anti-Takeover Considerations and Special Provisions of Our Certificate of Incorporation, Our Bylaws and the Delaware General Corporation Law - Stockholder Rights Plan”.

Preferred Stock

Pursuant to our Certificate of Incorporation, our Board has the authority, without further action by the stockholders (unless such stockholder action is required by applicable law or NASDAQ rules), to designate and issue shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the designations, powers (including voting), privileges, preferences and relative participating, optional or other rights, if any, of the shares of each such series and the qualifications, limitations or restrictions thereof, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

We will fix the designations, powers (including voting), privileges, preferences and relative participating, optional or other rights, if any, of the preferred stock of each series, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file

7

[Table of Contents](#)

with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

- the title and stated value;
- the number of shares we are offering;

- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction or remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into or exchangeable for other securities, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- voting rights, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- liability as to further calls or to assessment by the Company, if any;
- a discussion of any material United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on the issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

The DGCL provides that the holders of preferred stock will have the right to vote separately as a class (or, in some cases, as a series) on an amendment to our Certificate of Incorporation if the amendment would change the par value or, unless the Certificate of Incorporation provided otherwise, the number of authorized shares of the class or change the powers, preferences or special rights of the class or series so as to adversely affect the class or series, as the case may be. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

[Table of Contents](#)

Our Board may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock or other securities. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Anti-Takeover Considerations and Special Provisions of Our Certificate of Incorporation, Our Bylaws and the Delaware General Corporation Law

Stockholder Rights Plan

On August 6, 2002, our Board declared a dividend distribution of one preferred share purchase right (a “Purchase Right”) for each outstanding share of our common stock. The dividend was payable to the stockholders of record on August 6, 2002 (the “Record Date”), and with respect to shares of common stock issued thereafter until the Distribution Date (as defined below) and, in certain circumstances, with respect to shares of common stock issued after the Distribution Date. Except as set forth below, when it becomes exercisable, each Purchase Right entitles the registered holder to purchase from the Company one ten-thousandth (1/10,000) of a share of Series C Junior Participating Preferred Stock, par value \$0.01 per share, of the Company (the “Series C Preferred Stock”), at a price of \$66.90 per one ten-thousandth (1/10,000) of a share of Series C Preferred Stock (the “Purchase Price”), subject to adjustment. The description and terms of the Purchase Rights are set forth in a Rights Agreement between the Company and American Stock Transfer & Trust Company, as rights agent, dated as of August 15, 2002 (the “Effective Date”), as amended on January 16, 2003 (collectively, the “Rights Agreement”).

Initially, the Purchase Rights will be attached to all certificates representing shares of common stock outstanding as of the Record Date, and no separate certificates representing the Purchase Rights (“Right Certificates”) will be distributed. The Purchase Rights will separate from the common stock upon the earlier to occur of (A) a person or group of affiliated or associated persons having acquired beneficial ownership of fifteen percent (15%) or more of the outstanding shares of common stock or (B) ten (10) days (or such later date as the Board may determine) after the commencement of, or announcement of an intention to make, a tender offer or exchange offer the completion of which would result in a person or group of affiliated or associated persons becoming an Acquiring Person (as defined below) (in either case, the “Distribution Date”). A person or group whose acquisition of shares of common stock cause a distribution date pursuant to clause (A) above is an “Acquiring Person,” with certain exceptions set forth in the Rights Agreement. The date on which a person or group is first publicly announced to have become such by the Company or such Acquiring Person or an earlier date on which a majority of the then-sitting members of the Board becomes aware of the existence of such Acquiring Person is referred to below and in the Rights Agreement as the “Stock Acquisition Date”.

If any person becomes an Acquiring Person, each holder of a Purchase Right will thereafter have the right (the “Flip-In Right”) to receive, upon exercise, the number of shares of common stock (or, in certain circumstances, one ten-thousandth (1/10,000) of a share of Series C Preferred Stock) or other securities of the Company having a value (immediately before such triggering event) equal to two (2) times the exercise price of the Purchase Right. Notwithstanding the foregoing, after the Flip-In Right is triggered as described above, all Purchase Rights that are, or (under certain circumstances specified in the Rights Agreement) were, beneficially owned by any Acquiring Person or any affiliate or associate thereof will be null and void. The Board has the option, at any time after any person becomes an Acquiring Person but before an Acquiring Person becomes the beneficial owner of fifty percent (50%) or more of the Common Stock, to exchange all or part of the then-exercisable Purchase Rights (excluding those that have become void, as described in the immediately preceding sentence) for shares of common stock, at a one-to-one exchange ratio, appropriately adjusted to reflect any stock split, stock dividend or similar transaction having occurred since the Effective Date.

If, at any time after the Stock Acquisition Date, (A) the Company consolidates or merges with another person, (B) any Person merges with and into the Company, with the Company being the surviving corporation and, in connection with such merger, all or part of the common stock is changed into or exchanged for stock or other securities of any other Person (or of the Company) or cash or any other property, or (C) the Company sells or otherwise transfers, in one or more transactions, assets or earning power aggregating fifty percent (50%) or more of its consolidated assets or earning power to any other Person, then each holder of a Purchase Right (except Purchase

[Table of Contents](#)

Rights which previously have been voided as set forth above) shall thereafter have the right (the “Flip-Over Right”) to receive, upon exercise, common shares of the acquiring company (or, in certain circumstances, its parent), having a value equal to two times the exercise price of the Purchase Right. The holder of a Right will continue to have the Flip-Over Right whether or not such holder exercises or surrenders the Flip-In Right.

Series C Preferred Stock purchasable upon exercise of the Purchase Rights will not be redeemable. Each share of Series C Preferred Stock will be entitled to ten thousand (10,000) votes per share (subject to customary antidilution provisions) on matters submitted to a vote of the shareholders. Each share of Series C Preferred Stock will be entitled to a minimum preferential quarterly dividend payment of \$100 per share but, if greater, will be entitled to a total dividend per share of ten thousand (10,000) times the dividend declared per share of common stock. In the event of liquidation, the holders of shares of the Series C Preferred Stock will be entitled to a minimum preferential liquidation payment per share in an amount equal to the greater of \$66.90 or ten thousand (10,000) times the payment made per share of common stock plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment. Finally, in the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each share of Series C Preferred Stock will be entitled to receive ten thousand (10,000) times the amount received per share of common stock. These rights are protected by customary antidilution provisions.

At any time before the earlier to occur of (A) a person becoming an Acquiring Person or (B) the expiration of the Rights, and under certain other circumstances, the Company may redeem the Purchase Rights in whole, but not in part, at a price of \$0.01 per Purchase Right (the “Redemption Price”). The Purchase Rights are not exercisable until the Distribution Date and will expire on August 15, 2012, unless earlier redeemed.

Certificate of Incorporation and Bylaws

A number of provisions of our Certificate of Incorporation and our Bylaws concern matters of corporate governance and the rights of our stockholders. Provisions that grant our Board the ability to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof may discourage takeover attempts that are not first approved by our Board, including takeovers that may be considered by some stockholders to be in their best interests, such as those attempts that might result in a premium over the market price for the shares held by stockholders. Certain provisions could delay or impede the removal of incumbent directors even if such removal would be beneficial to our stockholders, such as the classification of our Board and the lack of cumulative voting. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management.

These provisions may have the effect of deterring hostile takeovers or delaying changes in our control or in our management. These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and in the policies they implement, and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts.

These provisions also could discourage or make more difficult a merger, tender offer or proxy contest, even if they could be favorable to the interests of stockholders, and could potentially depress the market price of our common stock. Our Board believes that these provisions are appropriate to protect our interests and the interests of our stockholders.

Classification of Board and No Cumulative Voting. Our Certificate of Incorporation and Bylaws provide for our Board to be divided into three classes, with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders representing a majority of the shares of common stock outstanding will be able to elect all of our directors due to be elected at each annual meeting of our stockholders.

[Table of Contents](#)

Meetings of and Actions by Stockholders. Our Bylaws provide that annual meetings of our stockholders may take place at the time and place designated by our Board. A special meeting of our stockholders may be called at any time by the Board, the chairman of the Board or the president. Subject to the rights of the holders of any series of preferred stock or any other class of stock or series thereof having a preference over the common stock as to dividends or upon liquidation, stockholders may take action only at a regular or special meeting of stockholders and not by written consent without a meeting.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our Bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders or to nominate candidates for election as directors at an annual meeting of stockholders must provide timely notice in writing. To be timely, a stockholder's notice must be delivered to our principal executive offices not less than 120 days prior to the date specified in the Company's proxy statement released to stockholders in connection with the previous year's annual meeting. If no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than 30 days from the date contemplated at the time of the previous year's proxy statement, notice by the stockholder in order to be timely must be received by the Company no later than the close of business on the later of the 120th day prior to the date of such annual meeting or the tenth day following the day on which public announcement of the date of the meeting was first made. Our Bylaws also specify requirements as to the form and content of a stockholder's notice. These provisions may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for the election of directors at an annual meeting of stockholders.

Filling of Board Vacancies. Our Certificate of Incorporation and our Bylaws provide that vacancies in the Board and newly created directorships resulting from any increase in the authorized number of directors on the Board may be filled by a majority of the directors remaining in office, even though that number may be less than a quorum of the Board, or by a sole remaining director. A director so elected to fill a vacancy shall serve for the remaining term of the predecessor he or she replaced and until his or her successor is elected and has qualified, or until his or her earlier resignation, removal or death.

Amendment of the Certificate of Incorporation. Our Certificate of Incorporation may be amended, altered, changed or repealed at a meeting of the stockholders of the Company entitled to vote thereon by the affirmative vote of a majority of the outstanding stock entitled to vote thereon and a majority of the outstanding stock of each class entitled to vote thereon as a class, in the manner prescribed by the DGCL.

Amendment of the Bylaws. Our Bylaws may be altered, amended, changed, added-to or repealed (i) by the board of directors or (ii) by the stockholders entitled to vote. The bylaws can only be amended if such amendment would not conflict with the Certificate of Incorporation or applicable law. Any bylaw made or altered by the requisite number of stockholders may be altered or repealed by the Board or by the requisite number of stockholders.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law ("Section 203"), which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

Table of Contents

- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66²/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, lease, transfer, pledge or other disposition of 10% or more of the assets of the corporation to or with the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an interested stockholder as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation or any entity or person affiliated with or controlling or controlled by such entity or person.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, 6201 15th Avenue, 2nd Floor, Brooklyn, NY 11219. Its phone number is 1(800)-937-5449. The transfer agent for any series of preferred stock, warrants, rights or units that we may offer under this prospectus will be named and described in the prospectus supplement for that series.

NASDAQ Global Market Listing

Our common stock is listed on the NASDAQ Global Market under the symbol "CLSN."

We may issue warrants for the purchase of our common stock or preferred stock, in one or more series. We may issue warrants independently or together with common stock or preferred stock, and the warrants may be attached to or separate from these securities.

The following description, together with the additional information we may include in any applicable prospectus supplement or free writing prospectus, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement or any applicable free writing prospectuses. If we indicate in the prospectus supplement or a free writing prospectus, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. However, no prospectus supplement or free writing prospectus shall fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on Form 8-K.

[Table of Contents](#)

General

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- if other than for cash, the property and manner in which the exercise price of the warrants may be paid;
- the minimum number of warrants that may be exercisable at any time;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special U.S. federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement or free writing prospectus at the exercise price that we describe in the applicable prospectus supplement or free writing prospectus. Unless we otherwise specify in the applicable prospectus supplement or free writing prospectus, holders of the warrants may exercise the warrants at any time up to 5:00 P.M. Eastern Time on the

[Table of Contents](#)

expiration date that we set forth in the applicable prospectus supplement or free writing prospectus. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement or free writing prospectus the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement or free writing prospectus, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of Maryland.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF RIGHTS

We may issue rights to purchase our common stock or preferred stock, in one or more series. Rights may be issued independently or together with any other offered security and may or may not be transferable by the person purchasing or receiving the subscription rights. In connection with any rights offering to our stockholders, we may enter into a standby underwriting arrangement with one or more underwriters pursuant to which such underwriters will purchase any offered securities remaining unsubscribed after such rights offering. In connection with a rights offering to our stockholders, we will distribute certificates evidencing the rights and a prospectus supplement to our stockholders on the record date that we set for receiving rights in such rights offering.

The applicable prospectus supplement or free writing prospectus will describe the following terms of rights in respect of which this prospectus is being delivered:

- the title of such rights;

[Table of Contents](#)

- the securities for which such rights are exercisable;
- the exercise price for such rights;
- the date of determining the security holders entitled to the rights distribution;
- the number of such rights issued to each security holder;
- the extent to which such rights are transferable;
- if applicable, a discussion of the material United States federal income tax considerations applicable to the issuance or exercise of such rights;
- the date on which the right to exercise such rights shall commence, and the date on which such rights shall expire (subject to any extension);
- the conditions to completion of the rights offering;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the rights;
- the extent to which such rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the material terms of any standby underwriting or other purchase arrangement that we may enter into in connection with the rights offering; and
- any other terms of such rights, including terms, procedures and limitations relating to the exchange and exercise of such rights.

Each right will entitle the holder thereof the right to purchase for cash such amount of shares of common stock or preferred stock, or any combination thereof, at such exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised at any time up to the close of business on the expiration date for such rights set forth in the prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void.

Rights may be exercised as set forth in the prospectus supplement relating to the rights offered thereby. Upon receipt of payment and the proper completion and due execution of the rights certificate at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will forward, as soon as practicable, the shares of common stock and/or preferred stock purchasable upon such exercise. We may determine to offer any unsubscribed offered securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

We may issue, in one more series, units consisting of our common stock, preferred stock, and/or warrants and/or rights for the purchase of common stock or preferred stock in any combination. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement or free writing prospectus. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of

[Table of Contents](#)

units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement or free writing prospectus the terms of the series of units being offered, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock,” “Description of Warrants,” and “Description of Rights” will apply to each unit and to any common stock, preferred stock, warrant or right included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

[Table of Contents](#)

PLAN OF DISTRIBUTION

Pursuant to General Instruction I.B.6 of Form S-3, we are permitted to utilize the registration statement of which this prospectus forms a part to sell a maximum amount of securities equal to one-third of the aggregate market value of the outstanding voting and non-voting common equity held by our non-affiliates in any 12 month period. We may, from time to time, offer the securities registered hereby up to this maximum amount.

We may sell the securities, from time to time, to or through underwriters or dealers, through agents or remarketing firms, or directly to one or more purchasers pursuant to:

- underwritten public offerings;
- negotiated transactions;

- block trades;
- “at the market offerings,” within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise, at prevailing market prices;
- through a combination of these methods.

We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

A prospectus supplement or supplements will describe the terms of the offering of the securities, including:

- the name or names of the underwriters, if any;
- if the securities are to be offered through the selling efforts of brokers or dealers, the plan of distribution and the terms of any agreement, arrangement, or understanding entered into with broker(s) or dealer(s) prior to the effective date of the registration statement, and, if known, the identity of any broker(s) or dealer(s) who will participate in the offering and the amount to be offered through each;
- the purchase price of the securities and the proceeds we will receive from the sale;
- if any of the securities being registered are to be offered otherwise than for cash, the general purposes of the distribution, the basis upon which the securities are to be offered, the amount of compensation and other expenses of distribution, and by whom they are to be borne;
- any delayed delivery arrangements;
- any over-allotment options under which underwriters may purchase additional securities from us;

[Table of Contents](#)

- any agency fees or underwriting discounts and other items constituting agents’ or underwriters’ compensation;
- any public offering price;
- any discounts, commissions or commissions allowed or reallowed or paid to dealers;
- the identity and relationships of any finders, if applicable; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Unless otherwise indicated in the prospectus supplement, subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may use a remarketing firm to offer the securities in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own account or as agents for us. These remarketing firms will offer or sell the securities pursuant to the terms of the securities. A prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket.

If we offer and sell securities through a dealer, we or an underwriter will sell the securities to the dealer, as principal. The dealer may resell the securities to the public at varying prices to be determined by the dealer at the time of resale. Any such dealer may be deemed to be an underwriter of the securities offered and sold. The name of the dealer and the terms of the transaction will be set forth in the applicable prospectus supplement.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may sell securities directly to one or more purchasers without using underwriters or agents. Underwriters, dealers and agents that participate in the distribution of the securities may be underwriters as defined in the Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with

[Table of Contents](#)

respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

We may offer new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters that are qualified market makers on the NASDAQ Global Market may engage in passive market making transactions in the common stock on the NASDAQ Global Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Venable LLP, Baltimore, Maryland. Any underwriter, dealer or agent may be advised about issues relating to any offering by its own legal counsel.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 have been so incorporated in reliance on the report of Stegman & Company, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, Celsion Corporation. The SEC's Internet site can be found at www.sec.gov.

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus.

[Table of Contents](#)

We incorporate by reference the following information or documents that we have filed with the SEC (Commission File No. 001-15911):

- our annual report on Form 10-K for the year ended December 31, 2008, filed with the SEC on March 27, 2009;
- our current report in Form 8-K, filed with the SEC on February 19, 2009, as amended by a Form 8-K/A filed on February 20, 2009;
- our current report in Form 8-K, filed with the SEC on March 3, 2009;
- the description of our common stock, which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A, filed with the SEC on May 26, 2000, as amended by a Form 8-A/A dated February 7, 2008; and
- the description of our Preferred Share Purchase Rights, which are registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A, filed with the SEC on September 9, 2002, as amended by a Form 8-A/A dated February 11, 2003 and a Form 8-A/A dated February 7, 2008.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to: Celsion Corporation, Attention: Corporate Secretary, 10220-L Old Columbia Road, Columbia, MD 21046-2364, telephone (410) 290-5390.

[Table of Contents](#)

2,018,153 Shares of Common Stock
Warrants to Purchase 1,009,076 Shares of Common Stock



CELSION CORPORATION

PROSPECTUS SUPPLEMENT

NEEDHAM & COMPANY, LLC

September 25, 2009
