

Celsion CORP

Form 424B5

June 16, 2016

Filed Pursuant to Rule 424(b)(5)

Registration Statement No. 333-206789

PROSPECTUS SUPPLEMENT

(To Prospectus dated September 25, 2015)

2,311,764 Shares of Common Stock

Pre-Funded Series B Warrants to purchase 2,100,000 Shares of Common Stock

2,100,000 shares of Common Stock underlying the Pre-Funded Series B Warrants

Pursuant to this prospectus supplement and the accompanying prospectus (the accompanying prospectus), we are offering 2,311,764 shares of our common stock, par value \$0.01 per share, to an investor at an offering price of \$1.36 per share for an aggregate purchase price of \$3,143,999. In addition, pursuant to this prospectus supplement and the accompanying prospectus, we are also offering Pre-Funded Series B Warrants to purchase 2,100,000 shares of our common stock (and the shares of common stock issuable upon exercise of the Pre-Funded Series B Warrants), in lieu of shares of common stock to the extent that the purchase of common stock would cause the beneficial ownership of a purchaser, together with its affiliates and certain related parties, to exceed 9.99% of our common stock. The Pre-Funded Series B Warrants will have an exercise price of \$0.01 per share of common stock and will be exercisable upon issuance until exercised in full. In a concurrent private placement, we are selling to each purchaser, for each share of common stock and pre-funded warrant purchased in this offering, a Series A warrant to purchase 0.5 share of common stock, a Series C warrant to purchase one share of common stock and a Series D warrant to purchase 0.5 share of common stock. The Series A warrants have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series C warrants have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate one year following issuance. The Series D warrants only become exercisable ratably upon the exercise of the Series C warrants, have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series A, Series C and Series D warrants and the shares of our common stock issuable upon exercise of such warrants are not being registered under the Securities Act of 1933, as amended (the Securities Act), are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being sold pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

Our common stock is listed on The NASDAQ Capital Market under the symbol "CLSN." On June 13, 2016, the last reported sale price of our common stock on The NASDAQ Capital Market was \$1.34 per share.

Edgar Filing: Celsion CORP - Form 424B5

As of June 13, 2016, the aggregate market value of our voting and non-voting common stock held by non-affiliates pursuant to General Instruction I.B.6. of Form S-3 was \$35,604,109, which was calculated based on 23,436,772 outstanding shares of our voting and non-voting common stock held by non-affiliates and at a price of \$1.73 per share, the closing sale price of our common stock reported on The NASDAQ Capital Market on April 18, 2016. As a result, we are eligible to offer and sell up to an aggregate of \$11,295,742 of shares of our common stock pursuant to General Instruction I.B.6. of Form S-3. Following this offering, we will have sold securities with an aggregate market value of \$7,349,292 pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this prospectus supplement.

As of the date of this prospectus supplement, an aggregate of \$67,650,708 of shares of common stock and other securities remain unsold under the registration statement on Form S-3 (File No. 333-206789) we filed with the Securities and Exchange Commission on September 4, 2015 and declared effective on September 25, 2015.

Pursuant to the Controlled Equity OfferingSM Sales Agreement dated as of February 1, 2013 (the Sales Agreement), by and between Cantor Fitzgerald & Co. and us, we may offer and sell, from time to time through “at-the-market” offerings, up to an aggregate of \$25.0 million of shares of our common stock. We filed with the Securities and Exchange Commission a prospectus supplement dated October 2, 2015 to the accompanying prospectus, covering the sales of shares of our common stock under the Sales Agreement. We have sold shares of our common stock under the Sales Agreement generating total gross proceeds of approximately \$7.6 million and have up to approximately \$17.4 million available for future sale under the Sales Agreement. In connection with this offering, we have agreed not to sell any additional shares under the Sales Agreement until the six-month anniversary of the closing date of this offering and, upon any exercise of at least 1/6th of the total number of Series C warrants sold in the concurrent private placement, for a period of one month from the date of such exercise, provided, however that such one month restriction shall cease if we do not receive payment of the aggregate exercise price for such warrants when due (other than in the case of a cashless exercise).

Investing in our securities involves a high degree of risk. Before making an investment decision, please read “Risk Factors” beginning on page S-10 of this prospectus supplement, page 9 of the accompanying prospectus and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

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

We are selling the shares of common stock and Pre-Funded Series B Warrants offered hereby directly to an investor. We have retained H.C. Wainwright & Co., LLC to act as the placement agent in connection with this offering. The placement agent has agreed to use its reasonable best efforts to solicit offers to purchase our common stock and Pre-Funded Series B Warrants. We have agreed to pay the placement agent a fee of 6.5% of the aggregate gross proceeds in this offering. The placement agent is not purchasing or selling any shares of our common stock or Pre-Funded Series B Warrants pursuant to this prospectus supplement or the accompanying prospectus, nor are we requiring any minimum purchase or sale of any specific number of shares of our common stock. See “Plan of Distribution” beginning on page S-30 of this prospectus supplement for more information regarding these arrangements.

	Public Offering Price	Placement Agent Fee⁽¹⁾	Proceeds, before expenses, to us
Per Common Share	\$ 1.3600	\$ 0.0884	
Total For Common Shares	\$ 3,143,999		

Per Warrant Share	\$1.3500	\$0.08775	
Total For Warrant Shares	\$2,835,000		
Total For All Shares	\$5,978,999	\$388,635	\$5,590,364

In addition to the placement agent fees, we have agreed to reimburse the placement agent in the amount of \$50,000 for its legal fees and expenses in connection with this offering and up to \$10,000 for its other out-of-pocket⁽¹⁾ expenses in connection with this offering. See “Plan of Distribution” beginning on page S-30 of this prospectus supplement for more information.

Delivery of the shares of common stock and Pre-Funded Series B Warrants will take place on or about 16, 2016, subject to the satisfaction of certain conditions.

Placement Agent

H.C. Wainwright & Co.

The date of this prospectus supplement is June 13, 2016

TABLE OF CONTENTS

	Page
Prospectus Supplement	
About this Prospectus Supplement	S-1
Prospectus Supplement Summary	S-2
The Offering	S-8
Risk Factors	S-10
Special Note Regarding Forward-Looking Statements	S-24
Use of Proceeds	S-26
Dividend Policy	S-26
Dilution	S-27
Price Range of Our Common Stock	S-28
Description of Securities We Are Offering	S-29
Plan of Distribution	S-30
Private Placement Transaction	S-32
Legal Matters	S-34
Experts	S-34
Where You Can Find More Information	S-35
Incorporation of Certain Documents by Reference	S-35
Prospectus	
About This Prospectus	1
Where You Can Find Additional Information	1
Information Incorporated by Reference	2
Forward-Looking Statements	3
Prospectus Summary	5
Risk Factors	9
Ratio of Earnings to Fixed Charges	10
Use of Proceeds	10
Dividend Policy	10
General Description of Securities	11
Description of Capital Stock	12
Description of Debt Securities	16
Description of Warrants, Other Rights and Units	22
Plan of Distribution	23
Legal Matters	25
Experts	25

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a “shelf” registration statement on Form S-3 (File No. 333-206789) that we filed with the Securities and Exchange Commission on September 4, 2015 and declared effective on September 25, 2015.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about the shares of our common stock and other securities we may offer from time to time under our shelf registration statement, some of which does not apply to the securities offered by this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference herein or therein, on the other hand, you should rely on the information in this prospectus supplement.

You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering before making an investment decision. You should also read and consider the information in the documents referred to in the sections of this prospectus supplement entitled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.”

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it.

We are not making an offer to sell the securities covered by this prospectus supplement in any jurisdiction where the offer or sale is not permitted.

The information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering is accurate only as of its respective date, regardless of the time of delivery of the respective document or of any sale of securities covered by this prospectus supplement. You should not assume that the information contained in or incorporated by reference in this prospectus supplement or the accompanying prospectus, or in any free writing prospectus that we have authorized for use in connection with this

offering, is accurate as of any date other than the respective dates thereof.

Unless the context indicates otherwise, as used in this prospectus, the terms “Celsion,” “the Company,” “we,” “us” and “our” refer to Celsion Corporation, a Delaware corporation, and its wholly-owned subsidiary, CLSN Laboratories, Inc., also a Delaware corporation. The Celsion brand and product names, including but not limited to Celsion®, ThermoDox®, EGEN®, TheraPlas™ and TheraSilence™ contained in this prospectus are trademarks, registered trademarks or service marks of Celsion Corporation or its subsidiary in the United States and certain other countries. This document may also contain references to trademarks and service marks of other companies that are the property of their respective owners.

S-1

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in the securities covered by this prospectus supplement. For a more complete understanding of Celsion and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference in this prospectus supplement and the accompanying prospectus and the information included in any free writing prospectus that we have authorized for use in connection with this offering, including the information set forth in the section titled "Risk Factors" in this prospectus supplement beginning on page S-10.

Overview

Celsion is a fully-integrated oncology drug development company focused on developing a portfolio of innovative cancer treatments, including directed chemotherapies, DNA-mediated immunotherapy and RNA based therapies. Our lead product candidate is ThermoDox[®], a proprietary heat-activated liposomal encapsulation of doxorubicin, currently in Phase III development for the treatment of primary liver cancer. Our pipeline also includes GEN-1 (formerly known as EGEN-001), a DNA-based immunotherapy for the localized treatment of ovarian and brain cancers. We have three platform technologies for the development of treatments for those suffering with difficult-to-treat forms of cancer, novel nucleic acid-based immunotherapies and other anti-cancer DNA or RNA therapies, including TheraPlas[™] and TheraSilence[™]. We are working to develop and commercialize more efficient, effective and targeted oncology therapies based on our technologies, with the goal to develop novel therapeutics that maximize efficacy while minimizing side-effects common to cancer treatments.

ThermoDox[®]

ThermoDox[®], is being evaluated in a Phase III clinical trial, in combination with a standardized radiofrequency ablation (RFA), for primary liver cancer (the OPTIMA Study) and a Phase II clinical trial for recurrent chest wall breast cancer (the DIGNITY study). ThermoDox[®] is a liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. Localized heat at hyperthermia temperatures (greater than 40 degrees Celsius) releases the encapsulated doxorubicin from the liposome enabling high concentrations of doxorubicin to be deposited preferentially in and around the targeted tumor.

The HEAT Study

On January 31, 2013, we announced that ThermoDox[®] in combination with RFA did not meet the primary endpoint, progression free survival (PFS), of a Phase III clinical trial enrolling 701 patients with primary liver cancer, which we called the HEAT Study. We determined, after conferring with the HEAT Study independent Data Monitoring Committee, that the HEAT Study did not meet the goal of demonstrating persuasive evidence of clinical effectiveness, that being a clinically meaningful improvement in progression free survival, that could form the basis for regulatory approval in the population chosen for the HEAT Study. In the trial, ThermoDox[®] was well-tolerated with no unexpected serious adverse events. Following the announcement of the HEAT Study results, we continue to follow patients for overall survival, the secondary endpoint of the HEAT Study. We have conducted a comprehensive analysis of the data from the HEAT Study to assess the future strategic value and development strategy for ThermoDox[®].

Findings from the HEAT Study post-hoc data analysis suggest that ThermoDox[®] may substantially improve overall survival, when compared to the control group, in patients if their lesions undergo a 45 minute RFA procedure standardized for a lesion greater than 3 cm in diameter. Data from eight OS sweeps have been conducted since the top line PFS data from the HEAT Study were announced in January 2013, with each data set showing progressive improvement in statistical significance. The most recent post-hoc OS analysis data from the HEAT Study as of July 15, 2015 showed that in a large, well bounded, subgroup of patients (n=285, 41% of the study patients), the combination of ThermoDox[®] and optimized RFA provided a 58% improvement in OS compared to optimized RFA alone. The Hazard Ratio at this latest OS analysis is 0.63 (95% CI 0.43 - 0.93) with a p-value of 0.0198. Median overall survival for the ThermoDox[®] group has been reached in this subgroup which translates into a 25.4 month (2.1 year) survival benefit over the optimized RFA only group (79 months for the ThermoDox[®] plus optimized RFA group versus 53.6 months for the optimized RFA only group). These data continue to support the protocol for the Phase III OPTIMA Study, as described below. This information should be viewed with caution since it is based on a retrospective analysis of a subgroup. We may choose to end this analysis of overall survival once the median is reached for both arms of the study. We also completed computational modeling with supplementary preclinical animal studies supporting the relationship between heating duration and clinical outcomes.

The OPTIMA Study

On February 24, 2014, we announced that the United States Food and Drug Administration (FDA), after its customary 30-day review period, provided clearance for the OPTIMA Study, which is a pivotal, double-blind, placebo-controlled Phase III trial of ThermoDox[®], in combination with standardized RFA, for the treatment of primary liver cancer. The trial design of the OPTIMA Study is based on the comprehensive analysis of data from the HEAT Study. We launched the OPTIMA Study in the first half of 2014. The OPTIMA Study was designed with extensive input from globally recognized HCC researchers and clinicians and after receiving formal written consultation from the FDA. The OPTIMA Study is expected to enroll up to 550 patients globally at up to 75 sites in the United States, Canada, Europe, China and other Asia Pacific regions, and will evaluate ThermoDox[®] in combination with standardized RFA, which will require a minimum of 45 minutes across all investigators and clinical sites for treating lesions three to seven centimeters, versus standardized RFA alone. The primary endpoint for this clinical trial is overall survival, and the secondary endpoints are progression free survival and safety. The statistical plan calls for two interim efficacy analyses by an independent Data Monitoring Committee.

On December 16, 2015, we announced that we had received the clinical trial application approval from the CFDA to conduct the OPTIMA Study in China. This clinical trial application approval will now allow Celsion to enroll patients at up to 20 additional clinical sites in China. With the addition of these Chinese clinical sites, the Company expects to complete enrollment in the OPTIMA Study during the first quarter of 2018. On April 26, 2016, we announced that the first patient in China has been enrolled in the OPTIMA Study. Results from the OPTIMA Study, if successful, will provide the basis for a global registration filing and marketing approval.

The DIGNITY Study

On December 14, 2015, we announced final data from our ongoing DIGNITY study, which is an open-label, dose-escalating Phase II trial of ThermoDox[®] in patients with recurrent chest wall (RCW) breast cancer. The DIGNITY Study is designed to establish a safe therapeutic dose in Phase I, and in Phase II to demonstrate local control, including complete and partial responses, and stable disease as its primary endpoint. The DIGNITY Study is also planned to evaluate kinetics in ThermoDox[®] produced from more than one manufacturing site. Of the 28 patients enrolled and treated, 21 patients were eligible for evaluation of efficacy. Approximately 62% of evaluable patients experienced a local response, including six complete responses and seven partial responses.

The Euro-DIGNITY Study

We anticipate that a Phase II study of RadioTherapy, HyperThermia and ThermoDox[®] to treat patients with local-regional recurrent chest wall breast cancer will be initiated by four to six clinical sites located in Italy, Israel, the Netherlands, Poland and the Czech Republic (the Euro-DIGNITY Study). The Euro-DIGNITY Study is expected to commence in the second half of 2016 and should enroll up to 70 patients affected by recurrent breast adenocarcinoma on the chest wall with/without nodes over a period of two years.

The primary objectives of the Euro-DIGNITY Study will be (i) to evaluate efficacy in patients after 3 cycles of ThermoDox[®] plus Hyperthermia measuring tumor diameter as a response to therapy and (ii) to evaluate loco-regional breast tumor control in patients who undergo ThermoDox[®]/hyperthermia/radiotherapy as measured by target lesion clinical response rate combining a RECIST criteria with digital photography to gauge response.

Secondary objectives of the Euro-DIGNITY Study will be (i) to evaluate the safety of the combination of ThermoDox/Hyperthermia/Radiotherapy among patients with local-regional recurrence (LRR) breast cancer, (ii) to evaluate the duration of local control complete response, partial response and stable disease following treatment with ThermoDox/Hyperthermia/Radiotherapy up to 24 months among patients with LRR breast cancer and (iii) to assess Patient Reported Quality of Life using the FACT-B and Brief Pain Inventory following treatment with ThermoDox/Hyperthermia/Radiotherapy among patients with LRR breast cancer.

Acquisition of EGEN Assets

On June 20, 2014, we completed the acquisition of substantially all of the assets of Egen, Inc., an Alabama corporation, which has changed its company name to EGWU, Inc. after the closing of the acquisition (EGEN), pursuant to an asset purchase agreement dated as of June 6, 2014, by and between EGEN and Celsion (the purchase agreement). CLSN Laboratories, Inc., a Delaware corporation and a wholly-owned subsidiary of Celsion (CLSN Laboratories), acquired all of EGEN's right, title and interest in and to substantially all of the assets of EGEN, including cash and cash equivalents, patents, trademarks and other intellectual property rights, clinical data, certain contracts, licenses and permits, equipment, furniture, office equipment, furnishings, supplies and other tangible personal property. In addition, CLSN Laboratories assumed certain specified liabilities of EGEN, including the liabilities arising out of the acquired contracts and other assets relating to periods after the closing date.

The total purchase price for the asset acquisition is up to \$44.4 million, including potential future earnout payments of up to \$30.4 million contingent upon achievement of certain earnout milestones set forth in the purchase agreement. At the closing, we paid approximately \$3.0 million in cash after the expense adjustment and issued 2,712,188 shares of our common stock to EGEN. The shares of common stock were issued in a private transaction exempt from registration under the Securities Act of 1933, as amended, pursuant to Section 4(2) thereof. In addition, 670,070 shares of common stock were held back by us at the closing and are issuable to EGEN on or after August 2, 2016 pending certain potential adjustments for expenses or in relation to EGEN's indemnification obligations under the purchase agreement.

The earnout payments of up to \$30.4 million will become payable, in cash, shares of our common stock or a combination thereof, at our option, as follows:

\$12.4 million will become payable upon achieving certain specified development milestones relating to an ovarian cancer study of GEN-1 (formerly known as EGEN-001) to be conducted by us or our subsidiary;

\$12.0 million will become payable upon achieving certain specified development milestones relating to a GEN-1 glioblastoma multiforme brain cancer study to be conducted by us or our subsidiary; and

up to \$6.0 million will become payable upon achieving certain specified milestones relating to the TheraSilence™ technology acquired from EGEN in the acquisition.

Our obligations to make the earnout payments will terminate on the seventh anniversary of the closing date.

In the acquisition, we purchased GEN-1 (formerly known as EGEN-001), a DNA-based immunotherapy for the localized treatment of ovarian and brain cancers, and three platform technologies for the development of treatments for those suffering with difficult-to-treat forms of cancer, novel nucleic acid-based immunotherapies and other anti-cancer DNA or RNA therapies, including TheraPlas™ and TheraSilence™.

GEN-1

GEN-1 is a DNA-based immunotherapeutic product for the localized treatment of ovarian and brain cancers by intraperitoneally administering an Interleukin-12 (IL-12) plasmid formulated with our proprietary TheraPlas™ delivery system. In this DNA-based approach, the immunotherapy is combined with a standard chemotherapy drug, which can potentially achieve better clinical outcomes than with chemotherapy alone. We believe that increases in IL-12 concentrations at tumor sites for several days after a single administration could create a potent immune environment against tumor activity and that a direct killing of the tumor with concomitant use of cytotoxic chemotherapy could result in a more robust and durable antitumor response than chemotherapy alone.

GEN-1 OVATION Study.

In February 2015, we announced that the FDA accepted, without objection, the Phase I dose-escalation clinical trial of GEN-1 in combination with the standard of care in neo-adjuvant ovarian cancer (the OVATION Study). On September 30, 2015, we announced enrollment of the first patient in the OVATION Study. The OVATION Study will seek to identify a safe, tolerable and potentially therapeutically active dose of GEN-1 by recruiting and maximizing an immune response and is designed to enroll three to six patients per dose level and will evaluate safety and efficacy and attempt to define an optimal dose for a follow-on Phase I/II study combining GEN-1 with Avastin® and Doxil®. In addition, the OVATION Study establishes a unique opportunity to assess how cytokine-based compounds such as GEN-1, directly affect ovarian cancer cells and the tumor microenvironment in newly diagnosed patients. The study is designed to characterize the nature of the immune response triggered by GEN-1 at various levels of the patients' immune system, including:

infiltration of cancer fighting T-cell lymphocytes into primary tumor and tumor microenvironment including peritoneal cavity, which is the primary site of metastasis of ovarian cancer;

changes in local and systemic levels of immuno-stimulatory and immunosuppressive cytokines associated with tumor suppression and growth, respectively; and

expression profile of a comprehensive panel of immune related genes in pre-treatment and GEN-1-treated tumor tissue.

We have initiated the study at four clinical sites at the University of Alabama at Birmingham, Oklahoma University Medical Center, Washington University in St. Louis and the Medical College of Wisconsin. In February 2016, we announced the completion of enrollment of the first cohort of patients in the OVATION Study. The OVATION Study will continue into 2016 at higher doses of GEN-1 with the goal to identify a safe, tolerable and therapeutically active dose of GEN-1 by recruiting and maximizing an immune response.

On May 2, 2016, we announced data from the first cohort of patients in the OVATION Study. In the first three patients dosed, GEN-1 plus standard chemotherapy produced positive results, with no dose limiting toxicities and promising efficacy signals leading to successful surgical outcomes as summarized below:

Of the three patients treated in the first cohort, two patients demonstrated stable disease (SD) and one patient demonstrated a complete response (CR), as measured by RECIST criteria.

All patients had successful resections of their tumors, with two patients having an R0 resection, which indicates a microscopically margin-negative resection in which no gross or microscopic tumor remains in the tumor bed, and one patient with an optimal R1 resection.

One patient demonstrated a pathological complete response (pCR). pCRs are typically seen in less than 7% of patients receiving neoadjuvant chemotherapy followed by surgical resection, and have been associated with a median overall survival (OS) of 72 months, which is more than three years longer than those who do not experience a pCR¹.

All patients experienced a dramatic > 96% drop in their CA-125 protein levels as of their most recent study visit. CA-125 is used to monitor certain cancers during and after treatment. CA-125 is present in greater concentrations in ovarian cancer cells than in other cells. A 50% reduction in CA-125 levels is considered meaningful. All patients' CA-125 levels were below the standard cutoff level of 35 U/mL.

GEN-1 Plus Doxil[®] and Avastin[®] Trial.

On April 29, 2015, we announced the expansion of our ovarian cancer development program to include a Phase I dose escalating trial to evaluate GEN-1 in combination with Avastin® and Doxil® in platinum-resistant ovarian cancer patients. We expect to enroll patients beginning in the second half of 2016. This new combination study in platinum-resistant ovarian cancer is supported by three preclinical studies indicating that the combination of GEN-1 with Avastin® may result in significant clinical benefit with a favorable safety profile. Specifically:

In two preclinical studies using an animal model of disseminated ovarian cancer, GEN-1 in combination with Avastin® led to a significant reduction in tumor burden and disease progression. The effectiveness of the combined treatment was seen when GEN-1 was combined with various dose levels of Avastin® (low-medium-high). Additionally, it was shown that GEN-1 treatment alone resulted in anti-tumor activity that was as good as or better than Avastin® treatment alone.

The preclinical studies indicated that no obvious overt toxicities were associated with the combined treatments. The preclinical data are also consistent with the mechanism of action for GEN-1, which exhibits certain anti-angiogenic properties and suggests that combining GEN-1 with lower doses of Avastin® may enhance efficacy and help reduce the known toxicities associated with this anti-VEGF drug.

The distinct biological activities of GEN-1 (immune stimulation) and Avastin® (inhibition of tumor blood vessel formation) makes a sound scientific rationale for this combination approach. Additionally, the anti-angiogenic activity of GEN-1 mediated through up regulation of the interferon gamma (IFN-g) pathway may help to explain the remarkable synergy between GEN-1 and Avastin® and potentially addresses the VEGF escape mechanisms associated with resistance to Avastin® therapy.

TheraPlas™ Technology Platform

TheraPlas™ is a technology platform for the delivery of DNA and messenger RNA (mRNA) therapeutics via synthetic non-viral carriers and is capable of providing cell transfection for double-stranded DNA plasmids and large therapeutic RNA segments such as mRNA. There are two components of the TheraPlas™ system, a plasmid DNA or mRNA payload encoding a therapeutic protein and a delivery system. The delivery system is designed to protect the DNA/RNA from degradation and promote trafficking into cells and through intracellular compartments. We designed the delivery system of TheraPlas™ by chemically modifying the low molecular weight polymer to improve its gene transfer activity without increasing toxicity. We believe that TheraPlas™ is a viable alternative to current approaches to gene delivery due to several distinguishing characteristics, including enhanced molecular versatility that allows for complex modifications to improve activity and safety.

TheraSilence™ Technology Platform

TheraSilence™ is a technology platform for the delivery of synthetically-generated inhibitory RNA (RNAi), such as small inhibitory RNAs (siRNAs), microRNAs, anti- microRNA mimics, microRNA mimics, and related molecules that can regulate protein expression at the transcript level by exploiting endogenous cell mechanisms. Inhibitory RNA-based therapies have the potential for targeting the disease-related genes with a high degree of specificity, including the target genes that have been widely identified as “non-druggable.” The TheraSilence™ technology seeks to address the primary obstacle to nucleic acid-based therapeutics, which is the efficient delivery of RNAs to target cells. Specifically, a delivery system needs to be able to protect the RNAi from nuclease degradation, transfer the molecule across the cellular membranes and release the material so that it can be available to the endogenous RNA silencing machinery. We have developed proprietary, novel structures that we believe are able to interact with the RNAi molecules forming protective nanoparticles that can be readily taken up into cells. In addition, these systems are chemically flexible and amenable to attachment of tissue-targeted ligands, in-vivo stabilizing agents and other functional moieties which can tailor a formulation for a particular application and delivery modality. We believe that these features can provide high specificity for RNAi delivery to select tissue, enhance stability and reduce in-vivo toxicity. In-vivo proof-of-concept studies of our most advanced system have shown the ability to deliver RNAi molecules specifically to the pulmonary vascular following intravenous administration. Using this delivery system we have been able to show in mice that delivery of a siRNA molecule that targets anti-vascular endothelial receptor 2 (VEGF2), a protein that is critical for the growth of new blood vessels in tumors, can significantly inhibit lung tumor growth. Additionally, delivery of an anti-micro RNA molecule into rats with experimentally induced pulmonary arterial hypertension was able to normalize vascular remodeling that occurs in the lung and restore cardiac function that is compromised as a result of the disease. This suggests that this delivery system can effectively deliver numerous potentially therapeutic molecular targets and may have application for the treatment of numerous lung diseases.

Business Strategy

We have not generated and do not expect to generate any revenue from product sales in the next several years, if at all, other than minimal revenue from the sale of reagent products we acquired from EGEN. An element of our business strategy has been to pursue, as resources permit, the research and development of a range of product candidates for a variety of indications. We may also evaluate licensing cancer products from third parties for cancer treatments to expand our product pipeline. This is intended to allow us to diversify the risks associated with our research and development expenditures. However, there can be no assurance that we will be able to develop and maintain a broad range of product candidates. To the extent we are unable to maintain a broad range of product candidates, our dependence on the success of one or a few product candidates would increase and results such as those announced in relation to the HEAT Study on January 31, 2013 will have a more significant impact on our financial prospects, financial condition and market value. We will assess our product pipeline and research and development priorities. We may also consider and evaluate strategic alternatives, including investment in, or acquisition of, complementary businesses, technologies or products. As demonstrated by the HEAT Study results, drug research and development is an inherently uncertain process and there is a high risk of failure at every stage prior to approval. The timing and the outcome of clinical results is extremely difficult to predict. Clinical development successes and failures can have a disproportionate positive or negative impact on our scientific and medical prospects, financial prospects, financial condition and market value.

Our current business strategy includes the possibility of entering into collaborative arrangements with third parties to complete the development and commercialization of our product candidates. In the event that third parties take over the clinical trial process for one or more of our product candidates, the estimated completion date would largely be under the control of that third party rather than us. We cannot forecast with any degree of certainty which proprietary products or indications, if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect our development plan or capital requirements. We may also apply for subsidies, grants or government or agency-sponsored studies that could reduce our development costs.

As a result of the uncertainties discussed above, among others, we are unable to estimate the duration and completion costs of our research and development projects or when, if ever, and to what extent we will receive cash inflows from the commercialization and sale of a product. Our inability to complete our research and development projects in a timely manner or to obtain positive results in our clinical trials, as well as any failure to enter into collaborative agreements when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. While our estimated future capital requirements are uncertain and could increase or decrease as a result of many factors, including the extent to which we choose to advance our research, development and clinical trials or whether we are in a position to pursue manufacturing or commercialization activities, it is clear we will need significant additional capital to develop our product candidates through clinical development, manufacturing and commercialization. We do not know whether we will be able to access additional capital when needed or on terms favorable to us or our stockholders. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

Corporate Information

We were founded in 1982 and are a Delaware corporation. Our shares of common stock trade on The NASDAQ Capital Market under the symbol "CLSN." Our principal executive offices are located at 997 Lenox Drive, Suite 100, Lawrenceville, New Jersey 08648. Our telephone number is (609) 896-9100 and our website is www.celsion.com. The information available on or through our website is not part of, nor incorporated by reference into, this prospectus supplement or the accompanying prospectus, and should not be relied upon.

THE OFFERING

Common stock offered by us 2,311,764 shares

Pre-Funded Series B Warrants 2,100,000 warrants

offered by us

Common stock to be outstanding before this offering 23,436,772 shares (as more fully described in the notes following this table)

Common stock to be outstanding after this offering 25,748,536 shares (as more fully described in the notes following this table)

Manner of offering Registered direct offering. See “Plan of Distribution” on page S-30 of this prospectus supplement.

Use of proceeds We currently intend to use the net proceeds from this offering for general corporate purposes, including research and development activities, capital expenditures and working capital. We may also use all or a portion of the net proceeds from this offering to fund possible investments in, or acquisitions of, complementary businesses, technologies or products, but we currently have no agreements or commitments with respect to any investment or acquisition. See “Use of Proceeds” on page S-26 of this prospectus supplement.

NASDAQ Capital Market CLSN symbol

Risk factors Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page S-10 of this prospectus supplement.

Description of Pre-Funded Series B Warrants The Pre-Funded Series B Warrants are being issued to prevent the beneficial ownership of a purchaser in this offering (together with its affiliates and certain related parties) of our common stock from exceeding 9.99%. Each Pre-Funded Series B Warrant will have an exercise price of \$0.01 per shares, will be exercisable upon issuance and will expire only when exercised in full. As stated above, the purchaser of Pre-Funded Series B Warrants will also receive Series A, Series C and Series D warrants as if such purchaser was buying shares of our common stock in this offering.

Concurrent private

placement

In a concurrent private placement, we are selling to each purchaser, for each share of common stock and pre-funded warrant purchased in this offering, a Series A warrant to purchase 0.5 share of common stock, a Series C warrant to purchase one share of common stock and a Series D warrant to purchase 0.5 share of common stock. The Series A warrants have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series C warrants have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate one year following issuance. The Series D warrants only become exercisable ratably upon the exercise of the Series C warrants, have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series A, Series C and Series D warrants and the shares of our common stock issuable upon exercise of such warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. See “Private Placement Transaction.”

S-8

The number of shares of our common stock shown above to be outstanding immediately after this offering is based on 23,436,772 shares outstanding as of June 13, 2016, and excludes, as of such date:

2,772,590 shares of our common stock subject to outstanding options having a weighted average exercise price of \$4.72 per share, and 81,518 shares of common stock subject to outstanding non-vested restricted stock awards with a weighted average grant date fair value of \$3.48;

793,180 shares of our common stock reserved for future issuance pursuant to our existing stock incentive plans;

2,100,000 shares of our common stock issuable upon the exercise of the Pre-Paid Series B Warrants, having an exercise price at \$0.01 per share;

5,894,675 shares of our common stock issuable upon exercise of warrants outstanding as of June 10, 2016, having a weighted average exercise price of 6.73 per share;

up to 670,070 shares of common stock held back by us at the closing of the acquisition of substantially all of the assets of Egen, Inc., an Alabama corporation which has changed its company name to EGWU, Inc. after the closing of the acquisition (EGEN), and shares of common stock that we may be required to issue in the future, subject to the requisite approval of our stockholders, for earnout payments of up to \$30.4 million upon achievement, if any, of the earnout milestones set forth in the asset purchase agreement dated as of June 6, 2014, by and between EGEN and us;

52,939 shares of our common stock held as treasury stock; and

8,823,528 shares of our common stock issuable upon exercise of the warrants to be issued in the concurrent private placement, having an exercise price of \$1.40 per share. See "Private Placement Transaction."

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks discussed below, together with the risks under the heading “Risk Factors” beginning on page 18 under Part I, Item IA of our Annual Report on Form 10-K and Amendment No. 1 on Form 10 K/A for the fiscal year ended December 31, 2015, filed with the Securities and Exchange Commission on March 30, 2016 and April 29, 2016, respectively, and any subsequent Quarterly Report on Form 10-Q, which are incorporated by reference into this prospectus supplement and the accompanying prospectus, as well as the other information in this prospectus supplement, the accompanying prospectus, the information and documents incorporated by reference and in any free writing prospectus that we have authorized for use in connection with this offering. If any of the identified risks actually occur, they could materially adversely affect our business, financial condition, operating results or prospects and the trading price of our securities. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also impair our business, financial condition, operating results and prospects and the trading price of our securities.

RISKS RELATED TO OUR BUSINESS

We have a history of significant losses from continuing operations and expect to continue such losses for the foreseeable future.

Since our inception, our expenses have substantially exceeded our revenue, resulting in continuing losses and an accumulated deficit of \$224 million at March 31, 2016. For the years ended December 31, 2013, 2014 and 2015 and the three months ended March 31, 2016, we incurred a net loss of \$8.3 million, \$25.5 million, \$22.5 million and \$5.7 million, respectively. We currently have no product revenue and do not expect to generate any product revenue for the foreseeable future other than through the sale of our proprietary reagent products for life science research, which products are based on our newly acquired proprietary delivery platform technologies, TheraPlas™ and TheraSilence™. Because we are committed to continuing our product research, development, clinical trial and commercialization programs, we will continue to incur significant operating losses unless and until we complete the development of ThermoDox®, GEN-1 (formerly known as EGEN-001) and other new product candidates and these product candidates have been clinically tested, approved by the U.S. Food and Drug Administration (FDA) and successfully marketed. The amount of future losses is uncertain. Our ability to achieve profitability, if ever, will depend on, among other things, us or our collaborators successfully developing product candidates, obtaining regulatory approvals to market and commercialize product candidates, manufacturing any approved products on commercially reasonable terms, establishing a sales and marketing organization or suitable third party alternatives for any approved product and raising sufficient funds to finance business activities. If we or our collaborators are unable to develop and commercialize one or more of our product candidates or if sales revenue from any product candidate that receives approval is insufficient, we will not achieve profitability, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Drug development is an inherently uncertain process with a high risk of failure at every stage of development. Our lead drug candidate failed to meet its primary endpoint in the Phase III HEAT Study.

On January 31, 2013, we announced that our lead product ThermoDox[®] in combination with radiofrequency ablation (RFA) failed to meet the primary endpoint of the Phase III clinical trial for primary liver cancer, known as the HEAT Study. We have not completed our final analysis of the data and do not know the extent to which, if any, the failure of ThermoDox[®] to meet its primary endpoint in the Phase III trial could impact our other ongoing studies of ThermoDox[®] including a pivotal, double-blind, placebo-controlled Phase III trial of ThermoDox[®] in combination with RFA in primary liver cancer, known as the OPTIMA Study, which we launched in the first half of 2014. The trial design of the OPTIMA Study is based on the overall survival data from the post-hoc analysis of results from the HEAT Study. ThermoDox[®] is also being evaluated in a Phase II clinical trial for recurrent chest wall breast cancer and other preclinical studies. In addition, we have initiated a Phase I dose-escalation clinical trial of GEN-1 in combination with the standard of care in neo-adjuvant ovarian cancer, known as the OVATION Study, and plan to expand our ovarian cancer development program to include a Phase I dose escalating trial evaluating GEN-1 in combination with Avastin[®] and Doxil[®] in platinum-resistant ovarian cancer patients.

Preclinical testing and clinical trials are long, expensive and highly uncertain processes and failure can unexpectedly occur at any stage of clinical development, as evidenced by the failure of ThermoDox[®] to meet its primary endpoint in the HEAT Study. Drug development is inherently risky and clinical trials take several years to complete. The start or end of a clinical trial is often delayed or halted due to changing regulatory requirements, manufacturing challenges, required clinical trial administrative actions, slower than anticipated patient enrollment, changing standards of care, availability or prevalence of use of a comparator drug or required prior therapy, clinical outcomes including insufficient efficacy, safety concerns, or our own financial constraints. The results from preclinical testing or early clinical trials of a product candidate may not predict the results that will be obtained in later phase clinical trials of the product candidate. We, the FDA or other applicable regulatory authorities may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects participating in such trials are being exposed to unacceptable health risks or adverse side effects. We may not have the financial resources to continue development of, or to enter into collaborations for, a product candidate if we experience any problems or other unforeseen events that delay or prevent regulatory approval of, or our ability to commercialize, product candidates. The failure of one or more of our drug candidates or development programs could have a material adverse effect on our business, financial condition and results of operations.

If we do not obtain or maintain FDA and foreign regulatory approvals for our drug candidates on a timely basis, or at all, or if the terms of any approval impose significant restrictions or limitations on use, we will be unable to sell those products and our business, results of operations and financial condition will be negatively affected.

To obtain regulatory approvals from the FDA and foreign regulatory agencies, we must conduct clinical trials demonstrating that our products are safe and effective. We may need to amend ongoing trials or the FDA and foreign regulatory agencies may require us to perform additional trials beyond those we planned. The testing and approval process requires substantial time, effort and resources, and generally takes a number of years to complete. The time to complete testing and obtaining approvals is uncertain, and the FDA and foreign regulatory agencies have substantial discretion, at any phase of development, to terminate clinical studies, require additional clinical studies or other testing, delay or withhold approval, and mandate product withdrawals, including recalls. In addition, our drug candidates may have undesirable side effects or other unexpected characteristics that could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restricted label or the delay or denial of regulatory approval by regulatory authorities. Even if we receive regulatory approval of a product, the approval may limit the indicated uses for which the drug may be marketed. The failure to obtain timely regulatory approval of product candidates, the imposition of marketing limitations, or a product withdrawal would negatively impact our business, results of operations and financial condition.

We do not expect to generate significant revenue for the foreseeable future.

We have devoted our resources to developing a new generation of products and will not be able to market these products until we have completed clinical trials and obtain all necessary governmental approvals. Our lead product candidate, ThermoDox[®] and the product candidates we purchased in our acquisition of substantially all of the assets of Egen, Inc., an Alabama corporation which has changed its company name to EGWU, Inc. after the acquisition (EGEN), including GEN-1, are still in various stages of development and trials and cannot be marketed until we have completed clinical testing and obtained necessary governmental approval. Following our announcement on January 31, 2013 that the HEAT Study failed to meet its primary endpoint of progression free survival, we continued to follow the patients enrolled in the HEAT Study to the secondary endpoint, overall survival. Based on the overall survival data from the post-hoc analysis of results from the HEAT Study, we launched a pivotal, double-blind, placebo-controlled Phase III trial of ThermoDox[®] in combination with RFA in primary liver cancer, known as the OPTIMA Study, in the first half of 2014. ThermoDox[®] is currently also being evaluated in a Phase II clinical trial for the treatment of recurrent chest wall breast cancer, known as the DIGNITY Study, and other preclinical studies. GEN-1 is currently in an early stage of clinical development for the treatment of ovarian cancer. We initiated a Phase I dose-escalation clinical trial of GEN-1 in combination with the standard of care in neo-adjuvant ovarian cancer in the second half of 2015 and plan to expand our ovarian cancer development program to include a Phase I 1 dose escalating trial evaluating GEN-1 in combination with Avastin[®] and Doxil[®] in platinum-resistant ovarian cancer patients. The delivery technology platforms, TheraPlas[™] and TheraSilence[™] are in preclinical stages of development. Accordingly, our revenue sources are, and will remain, extremely limited until our product candidates are clinically tested, approved by the FDA or foreign regulatory agencies and successfully marketed. We cannot guarantee that any of our product candidates will be approved by the FDA or any foreign regulatory agency or marketed, successfully or otherwise, at any time in the foreseeable future or at all.

S-11

We will need to raise substantial additional capital to fund our planned future operations, and we may be unable to secure such capital without dilutive financing transactions. If we are not able to raise additional capital, we may not be able to complete the development, testing and commercialization of our product candidates.

As of March 31, 2016, we had approximately \$14.3 million in cash and cash equivalents. We have substantial future capital requirements to continue our research and development activities and advance our drug candidates through various development stages, including the product candidates and technology platforms that we purchased from EGEN in June 2014. For example, ThermoDox[®] is being evaluated in a Phase III clinical trial in combination with RFA for the treatment of primary liver cancer, a Phase II clinical trial for the treatment of recurrent chest wall breast cancer and other preclinical studies. We initiated a Phase I dose escalation clinical trial of GEN-1 in combination with the standard of care in neo-adjuvant ovarian cancer in the second half of 2015 and plan to expand our ovarian cancer development program to include a Phase I dose escalating trial evaluating GEN-1 in combination with Avastin[®] and Doxil[®] in platinum-resistant ovarian cancer patients. We will continue to conduct additional analyses of the data from the HEAT Study to assess the future strategic value of ThermoDox[®] and are performing sub-group analysis of the Chinese cohort of patients in the HEAT Study and other activities for further development of ThermoDox[®] for mainland China, Hong Kong and Macau. To complete the development and commercialization of our product candidates, we will need to raise substantial amounts of additional capital to fund our operations. Our future capital requirements will depend upon numerous unpredictable factors, including, without limitation, the cost, timing, progress and outcomes of clinical studies and regulatory reviews of our proprietary drug candidates, our efforts to implement new collaborations, licenses and strategic transactions, general and administrative expenses, capital expenditures and other unforeseen uses of cash. We do not have any committed sources of financing and cannot assure you that alternate funding will be available in a timely manner, on acceptable terms or at all. We may need to pursue dilutive equity financings, such as the issuance of shares of common stock, convertible debt or other convertible or exercisable securities. Such dilutive equity financings could dilute the percentage ownership of our current common stockholders and could significantly lower the market value of our common stock. In addition, a financing could result in the issuance of new securities that may have rights, preferences or privileges senior to those of our existing stockholders.

If we are unable to obtain additional capital on a timely basis or on acceptable terms, we may be required to delay, reduce or terminate our research and development programs and preclinical studies or clinical trials, if any, limit strategic opportunities or undergo corporate restructuring activities. We also could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies, product candidates or potential markets or that could impose onerous financial or other terms. Furthermore, if we cannot fund our ongoing development and other operating requirements, particularly those associated with our obligations to conduct clinical trials under our licensing agreements, we will be in breach of these licensing agreements and could therefore lose our license rights, which could have material adverse effects on our business.

Failure to successfully integrate the assets we acquired from EGEN in June 2014 into our operations could adversely affect our ability to develop and commercialize product candidates or negatively impact our business, results of operations and financial conditions.

On June 20, 2014, we completed the acquisition of substantially all of the assets of EGEN, a privately-held biopharmaceutical company focused on the development of nucleic acid-based therapeutics for the treatment of cancer and other difficult to treat diseases. The acquisition included GEN-1 (formerly known as EGEN-001) and its therapeutic platform technologies, TheraPlas™ for delivery of DNA and mRNA, and TheraSilence™ for delivery of RNA. The success of the EGEN acquisition, including the realization of anticipated benefits and cost savings, will depend, in part, on our ability to combine successfully the business we acquired from EGEN with the business of Celsion. Our integration of the acquired operations and product candidates requires significant efforts, including the coordination of research and development, manufacturing, finance, information technologies and management and administration. These integration efforts will result in additional expenses and require significant time and dedication from management, and may divert management attention and resources. The integration may be more difficult, costly or time consuming than expected. It is possible that the integration process could result in the loss of key employees or the disruption of our ongoing business or that the alignment of standards, controls, procedures and policies may adversely affect the combined company's ability to maintain relationships with suppliers, manufacturers, other vendors or employees or to fully achieve the anticipated benefits and cost savings of the transaction.

In addition, the EGEN acquisition may result in our assumption of material unknown or unexpected liabilities. If we experience difficulties with the integration process, the anticipated benefits of the transaction may not be realized fully or at all, or may take longer to realize than expected to materialize. Factors that will affect the success of the acquisition include our ability to execute our business strategy, results of clinical trials and regulatory approvals related to the acquired product candidates and platform technologies, our ability to adequately fund acquired in-process research and development projects and retain key employees, as well as our ability to achieve financial and operational synergies with the acquired business, such as by achieving cost savings and effectively developing product candidates. Our failure to successfully manage and coordinate the growth of our newly acquired business could have a material adverse impact on our business, results of operations and financial condition. In addition, we cannot be certain that the product candidates we acquired will be approved for marketing and commercialization, become profitable or remain so or that we will realize operational cost savings or other expected synergies of the acquisition. If the acquisition and integration are not successful, we may record related asset impairment charges in the future.

We may not successfully engage in future strategic transactions, which could adversely affect our ability to develop and commercialize product candidates, impact our cash position, increase our expense and present significant distractions to our management.

In the future, we may consider strategic alternatives intended to further the development of our business, which may include acquiring businesses, technologies or products, out- or in-licensing product candidates or technologies or entering into a business combination with another company. Any strategic transaction may require us to incur non-recurring or other charges, increase our near- and long-term expenditures and pose significant integration or implementation challenges or disrupt our management or business. These transactions would entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, product candidates or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. Accordingly, although there can be no assurance that we will undertake or successfully complete any transactions of the nature described above, any transactions that we do complete may be subject to the foregoing or other risks and have a material adverse effect on our business, results of operations, financial condition and prospects. Conversely, any failure to enter any strategic transaction that would be beneficial to us could delay the development and potential commercialization of our product candidates and have a negative impact on the competitiveness of any product candidate that reaches market.

Strategic transactions, such as acquisitions, partnerships and collaborations, including the EGEN acquisition, involve numerous risks, including:

the failure of markets for the products of acquired businesses, technologies or product lines to develop as expected;

uncertainties in identifying and pursuing acquisition targets;

the challenges in achieving strategic objectives, cost savings and other benefits expected from acquisitions;

the risk that the financial returns on acquisitions will not support the expenditures incurred to acquire such businesses or the capital expenditures needed to develop such businesses;

difficulties in assimilating the acquired businesses, technologies or product lines;

the failure to successfully manage additional business locations, including the additional infrastructure and resources necessary to support and integrate such locations;

the existence of unknown product defects related to acquired businesses, technologies or product lines that may not be identified due to the inherent limitations involved in the due diligence process of an acquisition;

the diversion of management's attention from other business concerns;

S-13

risks associated with entering markets or conducting operations with which we have no or limited direct prior experience;

risks associated with assuming the legal obligations of acquired businesses, technologies or product lines;

risks related to the effect that internal control processes of acquired businesses might have on our financial reporting and management's report on our internal control over financial reporting;

the potential loss of key employees related to acquired businesses, technologies or product lines; and

the incurrence of significant exit charges if products or technologies acquired in business combinations are unsuccessful.

We may never realize the perceived benefits of the EGEN acquisition or potential future transactions. We cannot assure you that we will be successful in overcoming problems encountered in connection with any transactions, and our inability to do so could significantly harm our business, results of operations and financial condition. These transactions could dilute a stockholder's investment in us and cause us to incur debt, contingent liabilities and amortization/impairment charges related to intangible assets, all of which could materially and adversely affect our business, results of operations and financial condition. In addition, our effective tax rate for future periods could be negatively impacted by the EGEN acquisition or potential future transactions.

Our business depends on license agreements with third parties to permit us to use patented technologies. The loss of any of our rights under these agreements could impair our ability to develop and market our products.

Our success will depend, in a substantial part, on our ability to maintain our rights under license agreements granting us rights to use patented technologies. For instance, we are party to license agreements with Duke University, under which we have exclusive rights to commercialize medical treatment products and procedures based on Duke's thermo-sensitive liposome technology. The Duke University license agreement contains a license fee, royalty and research support provisions, testing and regulatory milestones, and other performance requirements that we must meet by certain deadlines. If we breach any provisions of the license and research agreements, we may lose our ability to use the subject technology, as well as compensation for our efforts in developing or exploiting the technology. Any such loss of rights and access to technology could have a material adverse effect on our business.

Further, we cannot guarantee that any patent or other technology rights licensed to us by others will not be challenged or circumvented successfully by third parties, or that the rights granted will provide adequate protection. We may be required to alter any of our potential products or processes, or enter into a license and pay licensing fees to a third party or cease certain activities. There can be no assurance that we can obtain a license to any technology that we

determine we need on reasonable terms, if at all, or that we could develop or otherwise obtain alternate technology. If a license is not available on commercially reasonable terms or at all, our business, results of operations, and financial condition could be significantly harmed and we may be prevented from developing and commercializing the product. Litigation, which could result in substantial costs, may also be necessary to enforce any patents issued to or licensed by us or to determine the scope and validity of others' claimed proprietary rights.

If any of our pending patent applications do not issue, or are deemed invalid following issuance, we may lose valuable intellectual property protection.

The patent positions of pharmaceutical and biotechnology companies, such as ours, are uncertain and involve complex legal and factual issues. We own various U.S. and international patents and have pending U.S. and international patent applications that cover various aspects of our technologies. There can be no assurance that patents that have issued will be held valid and enforceable in a court of law through the entire patent term. Even for patents that are held valid and enforceable, the legal process associated with obtaining such a judgment is time consuming and costly. Additionally, issued patents can be subject to opposition, interferences or other proceedings that can result in the revocation of the patent or maintenance of the patent in amended form (and potentially in a form that renders the patent without commercially relevant or broad coverage). Further, our competitors may be able to circumvent and otherwise design around our patents. Even if a patent is issued and enforceable, because development and commercialization of pharmaceutical products can be subject to substantial delays, patents may expire early and provide only a short period of protection, if any, following the commercialization of products encompassed by our patents. We may have to participate in interference proceedings declared by the U.S. Patent and Trademark Office, which could result in a loss of the patent and/or substantial cost to us.

We have filed patent applications, and plan to file additional patent applications, covering various aspects of our technologies and our proprietary product candidates. There can be no assurance that the patent applications for which we apply would actually issue as patents, or do so with commercially relevant or broad coverage. The coverage claimed in a patent application can be significantly reduced before the patent is issued. The scope of our claim coverage can be critical to our ability to enter into licensing transactions with third parties and our right to receive royalties from our collaboration partnerships. Since publication of discoveries in scientific or patent literature often lags behind the date of such discoveries, we cannot be certain that we were the first inventor of inventions covered by our patents or patent applications. In addition, there is no guarantee that we will be the first to file a patent application directed to an invention.

An adverse outcome in any judicial proceeding involving intellectual property, including patents, could subject us to significant liabilities to third parties, require disputed rights to be licensed from or to third parties or require us to cease using the technology in dispute. In those instances where we seek an intellectual property license from another, we may not be able to obtain the license on a commercially reasonable basis, if at all, thereby raising concerns on our ability to freely commercialize our technologies or products.

We rely on trade secret protection and other unpatented proprietary rights for important proprietary technologies, and any loss of such rights could harm our business, results of operations and financial condition.

We rely on trade secrets and confidential information that we seek to protect, in part, by confidentiality agreements with our corporate partners, collaborators, employees and consultants. We cannot assure you that these agreements are adequate to protect our trade secrets and confidential information or will not be breached or, if breached, we will have adequate remedies. Furthermore, others may independently develop substantially equivalent confidential and proprietary information or otherwise gain access to our trade secrets or disclose such technology. Any loss of trade secret protection or other unpatented proprietary rights could harm our business, results of operations and financial condition.

Our products may infringe patent rights of others, which may require costly litigation and, if we are not successful, could cause us to pay substantial damages or limit our ability to commercialize our products.

Our commercial success depends on our ability to operate without infringing the patents and other proprietary rights of third parties. There may be third party patents that relate to our products and technology. We may unintentionally infringe upon valid patent rights of third parties. Although we currently are not involved in any material litigation involving patents, a third party patent holder may assert a claim of patent infringement against us in the future. Alternatively, we may initiate litigation against the third party patent holder to request that a court declare that we are not infringing the third party's patent and/or that the third party's patent is invalid or unenforceable. If a claim of infringement is asserted against us and is successful, and therefore we are found to infringe, we could be required to pay damages for infringement, including treble damages if it is determined that we knew or became aware of such a

patent and we failed to exercise due care in determining whether or not we infringed the patent. If we have supplied infringing products to third parties or have licensed third parties to manufacture, use or market infringing products, we may be obligated to indemnify these third parties for damages they may be required to pay to the patent holder and for any losses they may sustain. We can also be prevented from selling or commercializing any of our products that use the infringing technology in the future, unless we obtain a license from such third party. A license may not be available from such third party on commercially reasonable terms, or may not be available at all. Any modification to include a non-infringing technology may not be possible or if possible may be difficult or time-consuming to develop, and require revalidation, which could delay our ability to commercialize our products. Any infringement action asserted against us, even if we are ultimately successful in defending against such action, would likely delay the regulatory approval process of our products, harm our competitive position, be expensive and require the time and attention of our key management and technical personnel.

S-15

We rely on third parties to conduct all of our clinical trials. If these third parties are unable to carry out their contractual duties in a manner that is consistent with our expectations, comply with budgets and other financial obligations or meet expected deadlines, we may not receive certain development milestone payments or be able to obtain regulatory approval for or commercialize our product candidates in a timely or cost-effective manner.

We do not independently conduct clinical trials for our drug candidates. We rely, and expect to continue to rely, on third-party clinical investigators, clinical research organizations (CROs), clinical data management organizations and consultants to design, conduct, supervise and monitor our clinical trials. Because we do not conduct our own clinical trials, we must rely on the efforts of others and have reduced control over aspects of these activities, including, the timing of such trials, the costs associated with such trials and the procedures that are followed for such trials. We do not expect to significantly increase our personnel in the foreseeable future and may continue to rely on third parties to conduct all of our future clinical trials.

If we cannot contract with acceptable third parties on commercially reasonable terms or at all, if these third parties are unable to carry out their contractual duties or obligations in a manner that is consistent with our expectations or meet expected deadlines, if they do not carry out the trials in accordance with budgeted amounts, if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols or for other reasons, or if they fail to maintain compliance with applicable government regulations and standards, our clinical trials may be extended, delayed or terminated or may become significantly more expensive, we may not receive development milestone payments when expected or at all, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

Despite our reliance on third parties to conduct our clinical trials, we are ultimately responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires clinical trials to be conducted in accordance with good clinical practices for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of clinical trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. If we or a third party we rely on fails to meet these requirements, we may not be able to obtain, or may be delayed in obtaining, marketing authorizations for our drug candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our drug candidates. This could have a material adverse effect on our business, financial condition, results of operations and prospects.

Because we rely on third party manufacturing and supply partners, our supply of research and development, preclinical and clinical development materials may become limited or interrupted or may not be of satisfactory quantity or quality.

We rely on third party supply and manufacturing partners to supply the materials and components for, and manufacture, our research and development, preclinical and clinical trial drug supplies. We do not own manufacturing facilities or supply sources for such components and materials. There can be no assurance that our supply of research and development, preclinical and clinical development drugs and other materials will not be limited, interrupted, restricted in certain geographic regions or of satisfactory quality or continue to be available at acceptable prices. Suppliers and manufacturers must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by FDA and foreign regulatory authorities in order to comply with regulatory standards, such as current Good Manufacturing Practices. In the event that any of our suppliers or manufacturers fails to comply with such requirements or to perform its obligations to us in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, we may be forced to manufacture the materials ourselves, for which we currently do not have the capabilities or resources, or enter into an agreement with another third party, which we may not be able to do on reasonable terms, if at all.

Our business is subject to numerous and evolving state, federal and foreign regulations and we may not be able to secure the government approvals needed to develop and market our products.

Our research and development activities, pre-clinical tests and clinical trials, and ultimately the manufacturing, marketing and labeling of our products, are all subject to extensive regulation by the FDA and foreign regulatory agencies. Pre-clinical testing and clinical trial requirements and the regulatory approval process typically take years and require the expenditure of substantial resources. Additional government regulation may be established that could prevent or delay regulatory approval of our product candidates. Delays or rejections in obtaining regulatory approvals would adversely affect our ability to commercialize any product candidates and our ability to generate product revenue or royalties.

The FDA and foreign regulatory agencies require that the safety and efficacy of product candidates be supported through adequate and well-controlled clinical trials. If the results of pivotal clinical trials do not establish the safety and efficacy of our product candidates to the satisfaction of the FDA and other foreign regulatory agencies, we will not receive the approvals necessary to market such product candidates. Even if regulatory approval of a product candidate is granted, the approval may include significant limitations on the indicated uses for which the product may be marketed.

We are subject to the periodic inspection of our clinical trials, facilities, procedures and operations and/or the testing of our products by the FDA to determine whether our systems and processes, or those of our vendors and suppliers, are in compliance with FDA regulations. Following such inspections, the FDA may issue notices on Form 483 and warning letters that could cause us to modify certain activities identified during the inspection.

Failure to comply with the FDA and other governmental regulations can result in fines, unanticipated compliance expenditures, recall or seizure of products, total or partial suspension of production and/or distribution, suspension of the FDA's review of product applications, enforcement actions, injunctions and criminal prosecution. Under certain circumstances, the FDA also has the authority to revoke previously granted product approvals. Although we have internal compliance programs, if these programs do not meet regulatory agency standards or if our compliance is deemed deficient in any significant way, it could have a material adverse effect on the Company.

We are also subject to recordkeeping and reporting regulations. These regulations require, among other things, the reporting to the FDA of adverse events alleged to have been associated with the use of a product or in connection with certain product failures.

Labeling and promotional activities also are regulated by the FDA. We must also comply with record keeping requirements as well as requirements to report certain adverse events involving our products. The FDA can impose other post-marketing controls on us as well as our products including, but not limited to, restrictions on sale and use, through the approval process, regulations and otherwise.

Many states in which we do or may do business, or in which our products may be sold, if at all, impose licensing, labeling or certification requirements that are in addition to those imposed by the FDA. There can be no assurance that one or more states will not impose regulations or requirements that have a material adverse effect on our ability to sell our products.

In many of the foreign countries in which we may do business or in which our products may be sold, we will be subject to regulation by national governments and supranational agencies as well as by local agencies affecting, among other things, product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. There can be no assurance that one or more countries or agencies will not impose regulations or requirements that could have a material adverse effect on our ability to sell our products.

Legislative and regulatory changes affecting the healthcare industry could adversely affect our business.

Political, economic and regulatory influences are subjecting the healthcare industry to potential fundamental changes that could substantially affect our results of operations. There have been a number of government and private sector initiatives during the last few years to limit the growth of healthcare costs, including price regulation, competitive pricing, coverage and payment policies, comparative effectiveness of therapies, technology assessments and managed-care arrangements. It is uncertain whether or when any legislative proposals will be adopted or what actions federal, state, or private payors for health care treatment and services may take in response to any healthcare reform proposals or legislation. We cannot predict the effect healthcare reforms may have on our business and we can offer no assurances that any of these reforms will not have a material adverse effect on our business. In addition, uncertainty remains regarding proposed significant reforms to the U.S. health care system.

We may seek Orphan Drug Designation for some of our product candidates, and we may be unsuccessful or may be unable to maintain the benefits associated with Orphan Drug Designation, including the potential for market exclusivity.

As part of our business strategy, we may seek Orphan Drug Designation for our product candidates, and we may be unsuccessful. Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States.

Even if we obtain Orphan Drug Designation for our product candidates in specific indications, we may not be the first to obtain marketing approval of these product candidates for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective or makes a major contribution to patient care. Orphan Drug Designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. In addition, while we may seek Orphan Drug Designation for our product candidates, we may never receive such designations.

The success of our products may be harmed if the government, private health insurers and other third-party payers do not provide sufficient coverage or reimbursement.

Our ability to commercialize our new cancer treatment systems successfully will depend in part on the extent to which reimbursement for the costs of such products and related treatments will be available from government health administration authorities, private health insurers and other third-party payors. The reimbursement status of newly approved medical products is subject to significant uncertainty. We cannot guarantee that adequate third-party insurance coverage will be available for us to establish and maintain price levels sufficient for us to realize an appropriate return on our investment in developing new therapies. Government, private health insurers and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new therapeutic products approved for marketing by the FDA. Accordingly, even if coverage and reimbursement are provided by government, private health insurers and third-party payors for uses of our products, market acceptance of these products would be adversely affected if the reimbursement available proves to be unprofitable for health care providers.

Our products may not achieve sufficient acceptance by the medical community to sustain our business.

The commercial success of our products will depend upon their acceptance by the medical community and third-party payors as clinically useful, cost effective and safe. Any of our drug candidates may prove not to be effective in practice. Our testing and clinical practice may not confirm the safety and efficacy of our product candidates or even if further testing and clinical practice produce positive results, the medical community may view these new forms of treatment as effective and desirable or our efforts to market our new products may fail. Market acceptance depends upon physicians and hospitals obtaining adequate reimbursement rates from third-party payors to make our products commercially viable. Any of these factors could have an adverse effect on our business, financial condition and results of operations.

The commercial potential of a drug candidate in development is difficult to predict. If the market size for a new drug is significantly smaller than we anticipate, it could significantly and negatively impact our revenue, results of operations and financial condition.

It is very difficult to predict the commercial potential of product candidates due to important factors such as safety and efficacy compared to other available treatments, including potential generic drug alternatives with similar efficacy profiles, changing standards of care, third party payor reimbursement standards, patient and physician preferences, the availability of competitive alternatives that may emerge either during the long drug development process or after commercial introduction, and the availability of generic versions of our successful product candidates following approval by government health authorities based on the expiration of regulatory exclusivity or our inability to prevent generic versions from coming to market by asserting our patents. If due to one or more of these risks the market potential for a drug candidate is lower than we anticipated, it could significantly and negatively impact the revenue potential for such drug candidate and would adversely affect our business, financial condition and results of operations.

We have no internal sales or marketing capability. If we are unable to create sales, marketing and distribution capabilities or enter into alliances with others possessing such capabilities to perform these functions, we will not be able to commercialize our products successfully.

We currently have no sales, marketing or distribution capabilities. We intend to market our products, if and when such products are approved for commercialization by the FDA and foreign regulatory agencies, either directly or through other strategic alliances and distribution arrangements with third parties. If we decide to market our products directly, we will need to commit significant financial and managerial resources to develop a marketing and sales force with technical expertise and with supporting distribution, administration and compliance capabilities. If we rely on third parties with such capabilities to market our products, we will need to establish and maintain partnership arrangements, and there can be no assurance that we will be able to enter into third-party marketing or distribution arrangements on acceptable terms or at all. To the extent that we do enter into such arrangements, we will be dependent on our marketing and distribution partners. In entering into third-party marketing or distribution arrangements, we expect to incur significant additional expenses and there can be no assurance that such third parties will establish adequate sales and distribution capabilities or be successful in gaining market acceptance for our products and services.

Technologies for the treatment of cancer are subject to rapid change, and the development of treatment strategies that are more effective than our technologies could render our technologies obsolete.

Various methods for treating cancer currently are, and in the future are expected to be, the subject of extensive research and development. Many possible treatments that are being researched, if successfully developed, may not require, or may supplant, the use of our technologies. The successful development and acceptance of any one or more of these alternative forms of treatment could render our technology obsolete as a cancer treatment method.

We may not be able to hire or retain key officers or employees that we need to implement our business strategy and develop our product candidates and business, including those purchased in the EGEN acquisition.

Our success depends significantly on the continued contributions of our executive officers, scientific and technical personnel and consultants, including those retained in the EGEN acquisition, and on our ability to attract additional personnel as we seek to implement our business strategy and develop our product candidates and businesses. Our operations associated with the EGEN acquisition are located in Huntsville, Alabama. Key employees may depart if we fail to successfully manage this additional business location or in relation to any uncertainties or difficulties of integration with Celsion. We cannot guarantee that we will retain key employees to the same extent that we and EGEN retained each of our own employees in the past, which could have a negative impact on our business, results of operations and financial condition. Our integration of EGEN and ability to operate in the fields we acquired from EGEN may be more difficult if we lose key employees. Additionally, during our operating history, we have assigned many essential responsibilities to a relatively small number of individuals. However, as our business and the demands on our key employees expand, we have been, and will continue to be, required to recruit additional qualified

employees. The competition for such qualified personnel is intense, and the loss of services of certain key personnel or our inability to attract additional personnel to fill critical positions could adversely affect our business. Further, we do not carry “key man” insurance on any of our personnel. Therefore, loss of the services of key personnel would not be ameliorated by the receipt of the proceeds from such insurance.

Our success will depend in part on our ability to grow and diversify, which in turn will require that we manage and control our growth effectively.

Our business strategy contemplates growth and diversification. Our ability to manage growth effectively will require that we continue to expend funds to improve our operational, financial and management controls, reporting systems and procedures. In addition, we must effectively expand, train and manage our employees. We will be unable to manage our business effectively if we are unable to alleviate the strain on resources caused by growth in a timely and successful manner. There can be no assurance that we will be able to manage our growth and a failure to do so could have a material adverse effect on our business.

We face intense competition and the failure to compete effectively could adversely affect our ability to develop and market our products.

There are many companies and other institutions engaged in research and development of various technologies for cancer treatment products that seek treatment outcomes similar to those that we are pursuing. We believe that the level of interest by others in investigating the potential of possible competitive treatments and alternative technologies will continue and may increase. Potential competitors engaged in all areas of cancer treatment research in the United States and other countries include, among others, major pharmaceutical, specialized technology companies, and universities and other research institutions. Most of our current and potential competitors have substantially greater financial, technical, human and other resources, and may also have far greater experience than do we, both in pre-clinical testing and human clinical trials of new products and in obtaining FDA and other regulatory approvals. One or more of these companies or institutions could succeed in developing products or other technologies that are more effective than the products and technologies that we have been or are developing, or which would render our technology and products obsolete and non-competitive. Furthermore, if we are permitted to commence commercial sales of any of our products, we will also be competing, with respect to manufacturing efficiency and marketing, with companies having substantially greater resources and experience in these areas.

We may be subject to significant product liability claims and litigation.

Our business exposes us to potential product liability risks inherent in the testing, manufacturing and marketing of human therapeutic products. We presently have product liability insurance limited to \$10 million per incident and \$10 million annually. If we were to be subject to a claim in excess of this coverage or to a claim not covered by our insurance and the claim succeeded, we would be required to pay the claim with our own limited resources, which could have a severe adverse effect on our business. Whether or not we are ultimately successful in any product liability litigation, such litigation would harm the business by diverting the attention and resources of our management, consuming substantial amounts of our financial resources and by damaging our reputation. Additionally, we may not be able to maintain our product liability insurance at an acceptable cost, if at all.

Our internal computer systems, or those of our CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Despite the implementation of security measures, our internal computer systems and those of our CROs and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such events could cause interruptions of our operations. For instance, the loss of preclinical data or data from any clinical trial involving our product candidates could result in delays in our development and regulatory filing efforts and significantly increase our costs. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could

be delayed.

RISKS RELATED TO THIS OFFERING AND OUR SECURITIES

The market price of our common stock has been, and may continue to be volatile and fluctuate significantly, which could result in substantial losses for investors and subject us to securities class action litigation.

The trading price for our common stock has been, and we expect it to continue to be, volatile. Our January 31, 2013 announcement that the HEAT Study failed to meet its primary endpoint has resulted in significant volatility and a steep decline in the price of our common stock, a level of decline that could result in securities litigation. Plaintiffs' securities litigation firms have publicly announced that they are investigating potential securities fraud claims that they may wish to make against us. 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 these factors are beyond our control. Broad market fluctuations may lower the market price of our common stock and affect the volume of trading in our stock, regardless of our financial condition, results of operations, business or prospect. The closing price of our common stock as reported on The NASDAQ Capital Market had a high price of \$3.15 and a low price of \$1.65 in the 52-week period ended December 31, 2015 and a high price of \$1.93 and a low price of \$1.08 from January 4, 2016 through June 13, 2016. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this "Risk Factors" section and other factors, including:

S-20

results of preclinical and clinical studies of our product candidates or those of our competitors;

regulatory or legal developments in the U.S. and other countries, especially changes in laws and regulations applicable to our product candidates;

actions taken by regulatory agencies with respect to our product candidates, clinical studies, manufacturing process or sales and marketing terms;

introductions and announcements of new products by us or our competitors, and the timing of these introductions or announcements;

announcements by us or our competitors of significant acquisitions or other strategic transactions or capital commitments;

fluctuations in our quarterly operating results or the operating results of our competitors;

variance in our financial performance from the expectations of investors;

changes in the estimation of the future size and growth rate of our markets;

changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;

failure of our products to achieve or maintain market acceptance or commercial success;

conditions and trends in the markets we serve;

changes in general economic, industry and market conditions;

success of competitive products and services;

changes in market valuations or earnings of our competitors;

changes in our pricing policies or the pricing policies of our competitors;

changes in legislation or regulatory policies, practices or actions;

the commencement or outcome of litigation involving our company, our general industry or both;

recruitment or departure of key personnel;

changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;

actual or anticipated changes in earnings estimates or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;

actual or expected sales of our common stock by our stockholders;

acquisitions and financings, including the EGEN acquisition; and

the trading volume of our common stock.

In addition, the stock markets, in general, The NASDAQ Capital Market and the market for pharmaceutical companies in particular, may experience a loss of investor confidence. Such loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, financial condition or results of operations. These broad market and industry factors may materially harm the market price of our common stock and expose us to securities class action litigation. Such litigation, even if unsuccessful, could be costly to defend and divert management's attention and resources, which could further materially harm our financial condition and results of operations.

The investor in this offering will experience substantial dilution in the net tangible book value per share of the common stock issuable upon conversion or exercise of the securities they purchase.

The investor in this offering will suffer substantial dilution in the net tangible book value of our common stock as of March 31, 2016 because each of the purchase price per share for our common stock offered in this offering is higher than the net tangible book value per share of our common stock as of March 31, 2016. See the section titled "Dilution" on page S-27 of this prospectus supplement for a more detailed discussion of the dilution you will incur in this offering. In addition, we have a significant number of options and warrants outstanding which have an exercise price lower than the purchase price per share for the common stock offered in this offering. If the holders of these securities exercise any such securities, the investor will incur further dilution.

We may be unable to maintain compliance with The NASDAQ Marketplace Rules which could cause our common stock to be delisted from The NASDAQ Capital Market. This could result in the lack of a market for our common stock, cause a decrease in the value of an investment in us, and adversely affect our business, financial condition and results of operations.

Our common stock is currently listed on The NASDAQ Capital Market. To maintain the listing of our common stock on The NASDAQ Capital Market, we are required to meet certain listing requirements, including, among others, either: (i) a minimum closing bid price of \$1.00 per share, a market value of publicly held shares (excluding shares held by our executive officers, directors and 10% or more stockholders) of at least \$1 million and stockholders' equity of at least \$2.5 million; or (ii) a minimum closing bid price of \$1.00 per share, a market value of publicly held shares (excluding shares held by our executive officers, directors and ten percent or more stockholders) of at least \$1 million and a total market value of listed securities of at least \$35 million. As of June 13, 2016, the closing sale price of our common stock was \$1.34, the total market value of our publicly held shares of our common stock (excluding shares held by our executive officers, directors and ten percent or more stockholders) was approximately \$27.7 million and the total market value of our listed securities was approximately \$31.4 million. There is no assurance that we will continue to meet the minimum closing price requirement and other listing requirements. As of March 31, 2016, we had stockholders' equity of \$15.3 million.

If the closing bid price of our common stock is below \$1.00 per share or the total market value of our publicly held shares of common stock is below \$35 million for 30 consecutive business days, we could be subject to delisting from The NASDAQ Capital Market. If our common stock is delisted, trading of the stock will most likely take place on an over-the-counter market established for unlisted securities, such as the Pink Sheets or the OTC Bulletin Board. An investor is likely to find it less convenient to sell, or to obtain accurate quotations in seeking to buy, our common stock on an over-the-counter market, and many investors may not buy or sell our common stock due to difficulty in accessing over-the-counter markets, or due to policies preventing them from trading in securities not listed on a national exchange or other reasons. In addition, as a delisted security, our common stock would be subject to SEC rules regarding "penny stock," which impose additional disclosure requirements on broker-dealers. The regulations relating to penny stocks, coupled with the typically higher cost per trade to investors in penny stocks due to factors such as broker commissions generally representing a higher percentage of the price of a penny stock than of a higher priced stock, would further limit the ability and willingness of investors to trade in our common stock. For these reasons and others, delisting would adversely affect the liquidity, trading volume and price of our common stock, causing the value of an investment in us to decrease and having an adverse effect on our business, financial condition and results of operations, including our ability to attract and retain qualified executives and employees and to raise capital.

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 June 13, 2016, we had 23,436,772 shares of common stock outstanding, all of which shares 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. As of June 13, 2016, we had outstanding equity awards (option and restricted stock awards) and warrants to purchase 2,772,590 and 5,894,675 shares of common stock, respectively. To the extent these options and warrants are exercised, a significant number of shares will be available for sale into the public market. Furthermore, up to 670,070 shares of common stock held back by us at the closing of the acquisition of substantially all of the assets of EGEN, and shares of common stock for earnout payments of up to \$30.4 million upon achievement, if any, of the earnout milestones in connection with the acquisition may be issued to EGEN in the future in accordance with the terms of the asset purchase agreement between EGEN and us.

Our stockholders may experience significant dilution as a result of future equity offerings or issuances and exercise of outstanding options and warrants.

In order to raise additional capital or pursue strategic transactions, we may in the future offer, issue or sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock, including the issuance of shares of common stock in relation to the achievement, if any, of earnout milestones in connection with the EGEN acquisition. Our stockholders may experience significant dilution as a result of future equity offerings or issuances. Investors purchasing shares or other securities in the future could have rights superior to existing stockholders. As of June 13, 2016, we had a significant number of securities convertible into, or allowing the purchase of, our common stock, including 5,894,675 shares of common stock issuable upon exercise of the outstanding warrants (without taking into account the warrants to be issued by us in the concurrent private placement), 2,772,590 shares of common stock underlying the outstanding options and outstanding restricted stock awards and 793,180 shares of common stock reserved for future issuance under our stock incentive plans. Under the Controlled Equity OfferingSM Sales Agreement entered into with Cantor Fitzgerald & Co. on February 1, 2013 (the Sales Agreement), we may offer and sell, from time to time through “at-the-market” offerings, up to an aggregate of \$25.0 million of shares of our common stock. We have sold shares of our common stock generating total gross proceeds of approximately \$7.6 million under the Sales Agreement as of the date of this prospectus supplement. In connection with the offering of shares of common stock covered by this prospectus supplement, we have agreed not to sell shares under the Sales Agreement until the six-month anniversary of the closing date of this offering.

We have broad discretion in the use of the net proceeds from this offering.

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 the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. We may use the net proceeds to continue or expand our research and development activities or to fund possible investments in, or acquisitions of, complementary businesses, technologies or products. It is possible that the net proceeds will be invested or otherwise used in a way that does not yield a favorable, or any, return for us.

The adverse capital and credit market conditions could affect our liquidity.

Adverse capital and credit market conditions could affect our ability to meet liquidity needs, as well as our access to capital and cost of capital. The capital and credit markets have experienced extreme volatility and disruption in recent years. Our results of operations, financial condition, cash flows and capital position could be materially adversely affected by continued disruptions in the capital and credit markets.

Our ability to use net operating losses to offset future taxable income are subject to certain limitations.

We currently have significant net operating losses (NOLs) that may be used to offset future taxable income. In general, under Section 382 of the Internal Revenue Code of 1986, as amended (the Code), a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. We annually perform analyses to determine if there were changes in ownership, as defined by Section 382 of the Code that would limit our ability to utilize certain net operating loss and tax credit carry forwards. We determined that we experienced an ownership change, as defined by Section 382, in connection with certain common stock offerings on July 25, 2011, February 5, 2013, June 3, 2013 and on June 1, 2015. As a result, the utilization of our federal tax net operating loss carry forwards generated prior to the ownership changes is limited.

S-23

Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code, which would significantly limit our ability to utilize NOLs to offset future taxable income.

We have never paid cash dividends on our common stock in the past and do not anticipate paying cash dividends on our common stock in the foreseeable future.

We have never declared or paid cash dividends on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for the foreseeable future for holders of our common stock.

Anti-takeover provisions in our charter documents and Delaware law could prevent or delay a change in control.

Our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition that a stockholder may consider favorable by authorizing the issuance of “blank check” preferred stock. This preferred stock may be issued by our board of directors on such terms as it determines, without further stockholder approval. Therefore, our board of directors may issue such preferred stock on terms unfavorable to a potential bidder in the event that our board of directors opposes a merger or acquisition. In addition, our classified board of directors may discourage such transactions by increasing the amount of time necessary to obtain majority representation on our board of directors. Certain other provisions of our bylaws and of Delaware law may also discourage, delay or prevent a third party from acquiring or merging with us, even if such action were beneficial to some, or even a majority, of our stockholders.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and 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 (SEC) and within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. From time to time, we publish forward-looking statements relating to matters such as anticipated financial performance, business prospects, technological developments, new products, research and development activities and other aspects of our present and future business operations as well as similar

matters. 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. Forward-looking statements include, among others:

any statements regarding future operations, plans, regulatory filings or approvals, including the plans and objectives of management for future operations or programs or proposed new products or services;

any statements regarding the performance, or likely performance, or outcomes or economic benefit of any of our research and development activities, proposed or potential clinical trials or new drug filing strategies or timelines, including whether any of our clinical trials will be completed successfully within any specified time period or at all;

any projections of earnings, cash resources, revenue, expense or other financial terms;

any statements regarding the initiation, timing, progress and results of our research and development programs, preclinical studies, any clinical trials and Investigational New Drug application, New Drug Application and other regulatory submissions;

any statements regarding cost and timing of development and testing, capital structure, financial condition, working capital needs and other financial items;

any statements regarding the implementation of our business model and integration of acquired technologies, assets or businesses and existing or future collaborations, mergers, acquisitions or other strategic transactions;

any statements regarding approaches to medical treatment, any introduction of new products by others, any possible licenses or acquisitions of other technologies, assets or businesses, or possible actions by customers, suppliers, strategic partners, potential strategic partners, competitors or regulatory authorities;

any statements regarding development or success of our collaboration arrangements or future payments that may come due to us under these arrangements;

any statements regarding compliance with the listing standards of The NASDAQ Capital Market; and

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

In some cases, you can identify forward-looking statements by terminology such as “expect,” “anticipate,” “estimate,” “continue,” “plan,” “believe,” “could,” “intend,” “predict,” “project,” “may,” “should,” “will” and words of similar import regarding 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 this prospectus supplement, the accompanying prospectus and any related free writing prospectus, and in our most recent Annual Report on Form 10-K and 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 us 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 over time new risks will emerge and the nature and elements of existing risks will change. 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. 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 supplement, the accompanying prospectus and any related free writing prospectus, together with the information incorporated herein or therein by reference, and with the understanding that our actual future results may materially differ 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.

S-25

USE OF PROCEEDS

We currently intend to use the net proceeds from this offering for general corporate purposes, including research and development activities, capital expenditures and working capital. We may also use all or a portion of the net proceeds from this offering to fund possible investments in, or acquisitions of, complementary businesses, technologies or products, but we currently have no agreements or commitments with respect to any investment or acquisition. Pending the application of the net proceeds, we intend to invest the net proceeds in short-term, investment grade, interest-bearing securities.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering, if any. As a result, our management will have broad discretion regarding the timing and application of the net proceeds from this offering.

DIVIDEND POLICY

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

DILUTION

If you invest in our common stock offered by this prospectus supplement and the accompanying prospectus, you will experience immediate dilution to the extent of the difference between the price per unit you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our net tangible book value as of March 31, 2016 was approximately \$(12.5) million, or approximately \$(0.533) per share of common stock. Net tangible book value per share as of March 31, 2016 equals the sum of our total tangible assets minus total liabilities, divided by the number of shares of our common stock outstanding as of March 31, 2016.

Dilution in net tangible book value per share represents the difference between the amount per share paid by the investor in this offering and the net tangible book value per share of our common stock immediately after this offering. After giving effect to the sale of 2,311,764 shares of our common stock in this offering at the offering price of \$1.36 per share, and after deducting the placement agent fees and the estimated offering expenses payable by us, our as adjusted net tangible book deficit as of March 31, 2016 would have been approximately \$12.5 million, or approximately \$(0.533) per share of common stock. This represents an immediate increase in the net tangible book value of approximately \$0.149 per share to our existing stockholders and an immediate dilution in the net tangible book value of approximately \$1.744 per share to the investor participating in this offering. The following table illustrates this calculation on a per share basis.

Public offering price per share	\$1.360
Net tangible book value per share as of March 31, 2016	\$(0.533)
Increase in net tangible book value per share attributable to this offering	\$0.420
As adjusted net tangible book value per share as of March 31, 2016, after giving effect to this offering	\$(0.384)
Dilution per share to the investor purchasing shares in this offering	\$1.744

The number of shares of our common stock shown above to be outstanding immediately after this offering is based on 23,424,699 shares outstanding as of March 31, 2016, and excludes, as of such date:

2,772,590 shares of our common stock subject to outstanding options having a weighted average exercise price of \$4.72 per share, and 81,518 shares of common stock subject to outstanding non-vested restricted stock awards with a weighted average grant date fair value of \$3.48;

793,180 shares of our common stock reserved for future issuance pursuant to our existing stock incentive plans;

2,100,000 shares of our common stock issuable upon the exercise of the Pre-Paid Series B Warrants, having an exercise price at \$0.01 per share;

5,894,675 shares of our common stock issuable upon exercise of warrants outstanding as of June 10, 2016, having a weighted average exercise price of 6.73 per share;

up to 670,070 shares of common stock held back by us at the closing of the acquisition of substantially all of the assets of Egen, Inc., an Alabama corporation which has changed its company name to EGWU, Inc. after the closing of the acquisition (EGEN), and shares of common stock that we may be required to issue in the future, subject to the requisite approval of our stockholders, for earnout payments of up to \$30.4 million upon achievement, if any, of the earnout milestones set forth in the asset purchase agreement dated as of June 6, 2014, by and between EGEN and us;

52,939 shares of our common stock held as treasury stock; and

8,823,528 shares of our common stock issuable upon exercise of the warrants to be issued in the concurrent private placement, having an exercise price of \$1.40 per share. See "Private Placement Transaction."

To the extent that any of our outstanding options or warrants are exercised, new options are issued under our stock incentive plans or we otherwise issue additional shares of common stock in the future, there may be further dilution to the investor participating in this offering.

PRICE RANGE OF OUR COMMON STOCK

Our common stock trades on The NASDAQ Capital Market under the symbol “CLSN.” The following table sets forth, for the periods indicated, the reported high and low sales prices per share of our common stock on The NASDAQ Capital Market.

Period	High	Low
<u>Year Ending December 31, 2016</u>		
First Quarter	\$1.99	\$1.04
Second Quarter (April 1, 2015 to June 13, 2016)	\$1.78	\$1.30
<u>Year Ended December 31, 2015</u>		
First Quarter	\$3.54	\$2.15
Second Quarter	\$3.57	\$2.42
Third Quarter	\$2.72	\$1.63
Fourth Quarter	\$2.31	\$1.61
<u>Year Ended December 31, 2014</u>		
First Quarter	\$4.74	\$3.31
Second Quarter	\$3.63	\$2.82
Third Quarter	\$3.73	\$2.90
Fourth Quarter	\$2.99	\$2.26

On June 13, 2016, the last reported closing sale price of our common stock on The NASDAQ Capital Market was \$1.34 per share.

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

We are offering 2,311,764 shares of our common stock, par value \$0.01 per share, to an investor at an offering price of \$1.36 per share. The material terms and provisions of our common stock are described under the heading “Description of Capital Stock” starting on page 9 of the accompanying prospectus.

Pre-Funded Series B Warrants

We are offering Pre-Funded Series B Warrants to purchase up to 2,100,000 shares of our common stock. Each Pre-Funded Series B Warrant has an exercise price of \$0.01 per share. The Pre-Funded Series B Warrants are exercisable at any time after their original issuance until exercised in full. The exercise of the Pre-Funded Series B Warrants is subject to certain exercise limitations, such that the holder may not exercise the Pre-Funded Series B Warrants if such exercise results in the holder becoming the beneficial owner of more than 9.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that, upon prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding, provided that any increase in such beneficial ownership shall not be effective until 61 days following such notice. Each Pre-Funded Series B Warrant will have a cashless exercise right in the event that the shares of common stock underlying such warrants are not covered by an effective registration statement at the time of such exercise.

The Pre-Funded Series B Warrants provide for the adjustment of the exercise price and number of shares issuable upon exercise of the Pre-Funded Series B Warrants in connection with stock dividends and splits, such that the number of shares issuable upon exercise of the Pre-Funded Series B Warrants is adjusted in proportion to the change in the number of shares outstanding and the aggregate exercise price of the Pre-Funded Series B Warrants remains unchanged. In addition, if we grant, issue or sell any common stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of common stock (and not the holder of the Pre-Funded Series B Warrants), then the Pre-Funded Series B Warrant holder will be entitled to acquire, upon the terms applicable to such purchase rights, the aggregate purchase rights which the holder could have acquired if the holder had held the number of shares of common stock acquirable upon complete exercise of the Pre-Funded Series B Warrants. If we declare or make any dividend or other distribution of our assets to holders of our common stock, the Pre-Funded Series B Warrant holder shall be entitled to participate in the distribution to the same extent that the holder would have participated therein if the holder had held the number of shares of common stock acquirable upon complete exercise of the Pre-Funded Series B Warrants. Other than as described above, the Pre-Funded Series B Warrants do not contain anti-dilution provisions.

Upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all

of our assets, the holder of each of the Pre-Funded Series B Warrants is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of such transaction by a holder of the number of shares of common stock for which the Pre-Funded Series B Warrants is exercisable immediately prior to such transaction.

The Pre-Funded Series B Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice. No fractional shares of common stock will be issued in connection with the exercise of a Pre-Funded Series B Warrant. Subject to applicable laws, the Pre-Funded Series B Warrants may be offered for sale, sold, transferred or assigned without our consent. We do not plan on applying to list the Pre-Funded Series B Warrants on the Nasdaq Capital Market, any other national securities exchange or any other nationally recognized trading system. Except as otherwise provided in the Pre-Funded Series B Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of Pre-Funded Series B Warrants does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Pre-Funded Series B Warrant. Amendments and waivers of the terms of the Pre-Funded Series B Warrants require the written consent of the holder of such Pre-Funded Series B Warrant and us.

PLAN OF DISTRIBUTION

Pursuant to an engagement agreement, dated as of June 6, 2016, by and between H.C. Wainwright & Co.,

LLC and us, we have engaged H.C. Wainwright & Co., LLC (the “placement agent”) as the placement agent in connection with this offering. The placement agent is not purchasing or selling any shares of our common stock or Pre-Funded Series B Warrants we are offering by this prospect supplement but has agreed to use its reasonable best efforts to arrange for the sale of shares of common stock and Pre-Funded Series B Warrants offered by this prospectus supplement. The placement agent may retain sub-agents and selected dealers in connection with this offering.

We have entered into a securities purchase agreement on June 13, 2016 directly with an investor who agrees to purchase shares of common stock and Pre-Funded Series B Warrants in this offering. The securities purchase agreement and the engagement agreement provides that the obligations of the placement agent and the investor are subject to certain conditions precedent, including, among other things, the absence of any material adverse change in our business and the receipt of customary opinions and closing certificates.

We currently anticipate that the closing of this offering will take place on or about June 16, 2016, subject to customary closing conditions. On the closing date, the following will occur:

we will receive funds in the amount of the aggregate purchase price;

The placement agent will receive the placement agent fees in accordance with the terms of the engagement agreement; and

we will deliver the shares of our common stock to the investor.

We have agreed to pay the placement agent a placement agent fee in cash equal to 6.5%, or \$388,635, of the gross proceeds from the sale of the shares of common stock and Pre-Funded Series B Warrants in this offering. The following table shows the per share and total placement agent fees we will pay in connection with the sale of the shares of common stock offered hereby, assuming the purchase of all of the shares of common stock we are offering.

Per Common Share placement agent fee	\$0.0884
Per Warrant Share placement agent fee	\$0.08775
Total	\$388,635

In addition, we have agreed to reimburse the placement agent at the closing for its legal fees and expenses in connection with this offering in the amount of \$50,000 and for its other out-of-pocket expenses in connection with this offering in the amount of up to \$10,000. We estimate the total expenses of this offering (including the expenses reimbursable to the placement agent) payable by us, excluding the placement agent fee, will be approximately \$125,000. After deducting the placement agent fee and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$5.5 million.

In addition, upon the consummation of this offering, we agree to grant the placement agent a right of first refusal to act as our lead managing underwriter, lead placement agent or lead agent for any future public or registered offerings of equity, equity-linked and debt offerings or debt financing or refinancing by us for no less than 80% of the commissions or placement agent fees payable by us to the underwriters or placement agents, except in certain circumstances, during the period from closing through December 31, 2016.

We have agreed to indemnify the placement agent and certain other persons against certain liabilities relating to or arising out of the placement agent's activities under 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.

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

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

must not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

A copy of the engagement agreement and the securities purchase agreement we entered into with the purchaser will be included as exhibits to our Current Report on Form 8-K that will be filed with the Securities and Exchange Commission in connection with the consummation of this offering.

The transfer agent for our common stock is American Stock Transfer & Trust Company, LLC, located at 6201 15th Avenue, Brooklyn, NY 11219. Its telephone number is 718-921-8200.

Our common stock is traded on The NASDAQ Capital Market under the symbol “CLSN.”

S-31

PRIVATE PLACEMENT TRANSACTION

In a concurrent private placement (the private placement transaction), we are selling to each purchaser in this offering, for each share of common stock and pre-funded warrant purchased in this offering, a Series A warrant to purchase 0.5 share of common stock, a Series C warrant to purchase one share of common stock and a Series D warrant to purchase 0.5 share of common stock. The Series A warrants have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series C warrants have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate one year following issuance. The Series D warrants only become exercisable ratably upon the exercise of the Series C warrants, have an exercise price of \$1.40 per share, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series A, Series C and Series D warrants and the shares of our common stock issuable upon exercise of such warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

The following is a brief summary of the warrants and is subject to, and qualified in its entirety by, the terms set forth in the forms of the common stock purchase warrant to be filed as an exhibit to our Current Report on Form 8-K, which we expect to file with the Securities and Exchange Commission in connection with this offering and the private placement transaction.

Exercisability. Holders of the warrants may exercise the warrants at any time as described above, subject to the beneficial ownership limitation described below. The holder shall deliver the aggregate exercise price for the shares of common stock specified in the exercise notice within three trading days following the date of exercise unless the cashless exercise is specified in the exercise notice.

Cashless Exercise. If, after six months of the date of issuance of the warrants, there is no effective registration statement registering, or no current prospectus available for, the resale of the warrant shares, the holder may only exercise the warrant, in whole or in part, 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. Any warrant that is outstanding on the termination date of the warrant shall be automatically exercised via cashless exercise.

Exercise Price. The exercise price of each warrant is \$1.40 per share of common stock and is subject to adjustment as described below.

Beneficial Ownership Limitation.

A holder shall have no right to exercise any portion of a warrant, to the extent that, after giving effect to such exercise, such holder, together with such holder's affiliates, and any persons acting as a group together with such holder or any such affiliate, would beneficially own in excess of, at the initial option of the holder thereof, 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of the shares of common stock upon such exercise. The holder of the warrant, upon not less than 61 days' prior notice to us, may increase or decrease the beneficial ownership limitation to a percentage not to exceed 9.99%. Beneficial ownership of the holder and its affiliates will be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

Certain Adjustments.

Stock dividends and stock splits. If we pay a stock dividend or otherwise make a distribution payable in shares of common stock on shares of common stock or any other common stock equivalents, subdivide or combine outstanding common stock, or reclassify common stock, the exercise price will be adjusted by multiplying the then exercise price by a fraction, the numerator of which shall be the number of shares of common stock (excluding treasury shares, if any) outstanding immediately before such event, and the denominator of which shall be the number of shares outstanding immediately after such event.

Rights Offerings; pro rata distributions. If we issue common stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to holders of common stock, a holder of a warrant will be entitled to acquire, subject to the beneficial ownership limitation described above, such common stock equivalents or rights that such holder could have acquired if such holder had held the number of shares of common stock issuable upon complete exercise of the warrant immediately prior to the date a record is taken for such issuance. If we declare or make any dividend or other distribution of assets or rights to acquire assets to holders of common stock, a holder of a warrant will be entitled to participate, subject to the beneficial ownership limitation, in such distribution to the same extent that the holder would have participated therein if the holder had held the number of warrant shares upon full exercise of the warrant.

Fundamental Transaction. If we effect a fundamental transaction, including, among other things, a merger, sale of substantially of the assets, tender offer, exchange offer and other business combination transactions, then upon any subsequent exercise of a warrant, the holder thereof shall have the right to receive, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of the successor's or acquiring corporation's common stock or of our common stock, if we are the surviving corporation, and any additional consideration receivable as a result of such fundamental transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such fundamental transaction.

Transferability. Each warrant and all rights thereunder are transferable, in whole or in part, upon surrender of the warrant, together with a written assignment of the warrant.

No Rights as Stockholder Until Exercise. The holders of the warrants do not have any voting rights, dividends or other rights as a holder of our capital stock until they exercise the warrants.

Registration Rights.

We are required to file a registration statement on Form S-3 within 45 days after the issuance of the warrants to provide for the resale of the warrant shares. We agree to use commercially reasonable efforts to cause such registration to become effective 181 days following the date of issuance of the warrants and to keep such registration statement effective at all times until (a) the warrant shares are sold under such registration statement or pursuant to Rule 144 under the Securities Act, (b) the warrant shares may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 under the Securities Act, and (c) the five-year anniversary of the date of the issuance of the warrants, whichever is the earliest to occur.

LEGAL MATTERS

Certain legal matters in connection with the shares of common stock offered hereby will be passed upon for us by Sidley Austin LLP, Palo Alto, California. Ellenoff Grossman & Schole LLP, New York, New York, acted as counsel to the placement agent in connection with this offering.

EXPERTS

Stegman & Company, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K, as amended by Amendment No. 1 on Form 10-K/A, for the year ended December 31, 2015, as set forth in their report, which is incorporated by reference in this prospectus supplement and the accompanying prospectus. Our financial statements are incorporated by reference in reliance on Stegman & Company's report, given on their authority as experts in accounting and auditing.

S-34

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended (Exchange Act). In accordance with the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (SEC). Such reports, proxy statements and other information filed by us are available to the public free of charge at www.sec.gov. You may also read and copy any document we file with the SEC at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference facilities by calling the SEC at 1-800-SEC-0330. Copies of certain information filed by us with the SEC are also available on our website at www.celsion.com. The information available on or through our website is not part of this prospectus supplement or the accompanying prospectus and should not be relied upon.

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

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The Securities and Exchange Commission (SEC) rules allow us to “incorporate by reference” into this prospectus supplement and the accompanying prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference into this prospectus supplement and the accompanying prospectus is considered to be part of this prospectus supplement and the accompanying prospectus. These documents may include Annual Reports on Form 10-K and Form 10-K/A, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

This prospectus supplement and the accompanying prospectus incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents deemed to be furnished and not filed in accordance with SEC rules):

Edgar Filing: Celsion CORP - Form 424B5

our Annual Report on Form 10-K and Amendment No. 1 on Form 10-K/A for the fiscal year ended December 31, 2015, filed with the SEC on March 30, 2016 and April 29, 2016, respectively;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, filed with the SEC on May 16, 2016;

our Current Reports on Form 8-K filed with the SEC on June 1, 2016;

our Definitive Proxy Statement on Schedule 14A filed with the SEC on May 5, 2016; and

the description of our common stock contained 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 any amendments or reports filed for the purpose of updating such description.

Any statement contained in any document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or any additional prospectus supplement modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

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

We will provide without charge to each person, including any beneficial owners, to whom this prospectus supplement is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus supplement and the accompanying prospectus but not delivered with this prospectus supplement. You may request a copy of these documents by writing or telephoning us at the following address:

Celsion Corporation

997 Lenox Drive, Suite 100

Lawrenceville, New Jersey 08648

(609) 896-9100

Attention: Jeffrey W. Church

Senior Vice President and Chief Financial Officer

S-36

PROSPECTUS

\$75,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Rights

Units

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

common stock;

preferred stock;

debt securities;

warrants to purchase common stock or preferred stock;

rights to purchase common stock or preferred stock; and

units comprised of two or more of the foregoing securities.

We may sell any combination of these securities in one or more offerings, up to an aggregate offering price of \$75,000,000, in amounts, at prices and on terms to be determined at the time of each offering thereof. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities using this prospectus, we will provide the specific terms of the securities and the offering 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 to, update or change the information contained in this prospectus and will also describe the specific manner in which we will offer the securities.

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 titled “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.

This prospectus may not be used to sell any securities unless accompanied by a prospectus supplement. You should carefully read this prospectus, any accompanying prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, prior to investing in any of our securities.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “Risk Factors” beginning on page 9 of this prospectus, in any accompanying prospectus supplement and in any related free writing prospectus, and under similar headings in the documents incorporated by reference into this prospectus, any accompanying prospectus supplement and any related free writing prospectus.

Our common stock is traded on The NASDAQ Capital Market under the symbol “CLSN.” On September 3, 2015, the last reported sale price of our common stock on The NASDAQ Capital Market was \$1.98 per share. We do not expect our preferred stock, debt securities, warrants, rights or units to be listed on any securities exchange or over-the-counter market unless otherwise described in the applicable prospectus supplement.

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 September 25, 2015

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND ADDITIONAL INFORMATION	1
INFORMATION INCORPORATED BY REFERENCE	2
FORWARD-LOOKING STATEMENTS	3
PROSPECTUS SUMMARY	5
RISK FACTORS	9
RATIO OF EARNINGS TO FIXED CHARGES	10
USE OF PROCEEDS	10
DIVIDEND POLICY	10
GENERAL DESCRIPTION OF SECURITIES	11
DESCRIPTION OF CAPITAL STOCK	12
DESCRIPTION OF DEBT SECURITIES	16
DESCRIPTION OF WARRANTS, OTHER RIGHTS AND UNITS	22
PLAN OF DISTRIBUTION	23
LEGAL MATTERS	25
EXPERTS	25

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (SEC) utilizing a “shelf” registration process. Under this shelf registration process, we may, from time to time, offer shares of our common stock, shares of our preferred stock, debt securities, warrants, rights or units comprised of two or more of the foregoing securities in one or more offerings, for a total maximum offering price not to exceed \$75,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell any securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that specific offering, including the specific amounts, prices and terms of the securities offered. Any prospectus supplement may include a discussion of risks or other special considerations applicable to us or the offered securities. Any prospectus supplement may also add to, update or change information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any prospectus, on the other hand, you should rely on the information in the 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.

This prospectus and any applicable prospectus supplement contain and incorporate by reference market data, industry statistics and other data that have been obtained or compiled from information made available by third parties. These data, to the extent they contain estimates or projections, involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates or projections. Industry publications and other reports we have obtained from independent parties generally state that the data contained in these publications or other reports have been obtained in good faith or from sources considered to be reliable, but they do not guarantee the accuracy or completeness of such data.

We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, any documents that we incorporate by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus, and the additional information described below under “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” before making an investment decision. You should rely only on the information contained or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with additional, different or inconsistent information, you should not rely on it. You should not assume that the information we have included in this prospectus, any applicable prospectus supplement, any related free writing prospectus or any documents incorporated by reference herein or therein is accurate as of any date other than the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

This document may only be used where it is legal to sell these securities. This prospectus is not an offer to sell these securities and it is no soliciting an offer to buy these securities in any jurisdiction whether the offer or sale is not permitted.

Unless the context indicates otherwise, as used in this prospectus, the terms “Celsion,” “the Company,” “we,” “us” and “our” refer to Celsion Corporation, a Delaware corporation, and its wholly-owned subsidiary, CLSN Laboratories, Inc., also a Delaware corporation. The Celsion brand and product names, including but not limited to Celsion®, ThermoDox®, EGEN®, TheraPlas™ and TheraSilence™ contained in this prospectus are trademarks, registered trademarks or service marks of Celsion Corporation or its subsidiary in the United States and certain other countries. This document may also contain references to trademarks and service marks of other companies that are the property of their respective owners.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended (Exchange Act). In accordance with the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information filed by us are available to the public free of charge at www.sec.gov. You may also read and copy any document we file with the SEC at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference facilities by calling the SEC at 1-800-SEC-0330. Copies of certain information filed by us with the SEC are also available on our website at www.celsion.com. The information available on or through our website is not part of this prospectus or any accompanying prospectus supplement or related free writing prospectus and should not be relied upon.

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

INFORMATION INCORPORATED BY REFERENCE

The SEC rules allow us to “incorporate by reference” into this prospectus information that we file with the SEC. Incorporation by reference allows us to disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference into this prospectus is considered to be part of this prospectus. These documents may include Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements. You should read the information incorporated by reference because it is an important part of this prospectus.

This prospectus incorporates by reference the documents listed below, other than those documents or the portions of those documents deemed to be furnished and not filed in accordance with the SEC rules:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 filed with the SEC on March 12, 2015;

our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015 filed with the SEC on May 11, 2015 as amended by the Amendment No. 1 to Form 10-Q filed with the SEC on June 19, 2015;

our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015 filed with the SEC on August 10, 2015;

our Current Reports on Form 8-K filed with the SEC on January 20, 2015, May 28, 2015, May 29, 2015 and June 19, 2015, and on Form 8-K/A filed with the SEC on May 29, 2015 (as Amendment No. 2 to our Current Report on Form 8-K filed with the SEC on June 20, 2014 and Amendment No. 1 on Form 8-K/A filed with the SEC on August 25, 2014);

our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 30, 2015; and

the description of our common stock contained 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 any amendments or reports filed for the purpose of updating such description.

Any statement contained in any document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any prospectus supplement modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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, in each case, other than those documents or the portions of those documents deemed to be furnished and not filed in accordance with SEC rules, until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will 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.

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

We will provide without charge to each person, including any beneficial owners, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus but not delivered with this prospectus, excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You may request a copy of these documents by writing or telephoning us at the following address.

Celsion Corporation

997 Lenox Drive, Suite 100

Lawrenceville, New Jersey 08648

(609) 896-9100

Attention: Jeffrey W. Church

Senior Vice President and Chief Financial Officer

FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this prospectus, in any applicable prospectus 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 (Securities Act), and Section 21E of the Exchange Act. From time to time, we publish forward-looking statements relating to matters such as anticipated financial performance, business prospects, technological developments, new products, research and development activities, mergers, acquisitions or other strategic transactions 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 statements include, without limitation:

any statements regarding future operations, plans, regulatory filings or approvals, including the plans and objectives of management for future operations or programs or proposed new products or services;

any statements regarding the performance, or likely performance, or outcomes or economic benefit of any of our research and development activities, proposed or potential clinical trials or new drug filing strategies or timelines, including whether any of our clinical trials will be completed successfully within any specified time period or at all;

any projections of earnings, cash resources, revenue, expense or other financial terms;

any statements regarding the initiation, timing, progress and results of our research and development programs, preclinical studies, any clinical trials and Investigational New Drug application, New Drug Application and other regulatory submissions;

any statements regarding cost and timing of development and testing, capital structure, financial condition, working capital needs and other financial items;

any statements regarding the implementation of our business model and integration of acquired technologies, assets or businesses and existing or future collaborations, mergers, acquisitions or other strategic transactions;

any statements regarding approaches to medical treatment, any introduction of new products by others, any possible licenses or acquisitions of other technologies, assets or businesses, or possible actions by customers, suppliers, strategic partners, potential strategic partners, competitors or regulatory authorities;

any statements regarding development or success of our collaboration arrangements or future payments that may come due to us under these arrangements;

any statements regarding compliance with the listing standards of The NASDAQ Capital Market; and

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

In some cases, you can identify forward-looking statements by terminology such as “expect,” “anticipate,” “estimate,” “continue,” “plan,” “believe,” “could,” “intend,” “predict,” “project,” “potential,” “may,” “should,” “will” or the negative thereof similar expressions. 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 this prospectus and any related free writing prospectus, and in our most recent Annual Report on Form 10-K and 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 over time new risks will emerge and the nature and elements of existing risks will change. 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. 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, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein or therein by reference as described under the section titled “Information Incorporated By Reference,” and with the understanding that our actual future results may materially differ from what we expect.

Except as required by law, forward-looking statements speak only as of the dates 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.

PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere 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 carefully, including the matters discussed under the heading “Risk Factors” in this prospectus.

Overview

Celsion is a fully-integrated oncology drug development company focused on developing a portfolio of innovative cancer treatments, including directed chemotherapies, immunotherapies and RNA- or DNA-based therapies. Our lead program is ThermoDox[®], a proprietary heat-activated liposomal encapsulation of doxorubicin, currently in Phase III clinical trial for the treatment of primary liver cancer, also known as hepatocellular carcinoma or HCC, and a Phase II clinical trial for the treatment of recurrent chest wall breast cancer. Our pipeline also includes GEN-1 (formerly known as EGEN-001), a DNA-based immunotherapy for the localized treatment of ovarian and brain cancers. We have three platform technologies for the development of treatments for those suffering with difficult-to-treat forms of cancer, novel nucleic acid-based immunotherapies and other anti-cancer DNA or RNA therapies, including TheraPlas[™] and TheraSilence[™]. We are working to develop and commercialize more efficient, effective and targeted oncology therapies based on our technologies, with the goal to develop novel therapeutics that maximize efficacy while minimizing side-effects common to cancer treatments.

Our lead product, ThermoDox[®], is being evaluated in a Phase III clinical trial, in combination with a standardized radiofrequency ablation (RFA), for primary liver cancer (the OPTIMA study) and a Phase II clinical trial for recurrent chest wall breast cancer (the DIGNITY study). ThermoDox[®] is a liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. Localized heat at mild hyperthermia temperatures (greater than 39.5 degrees Celsius) releases the encapsulated doxorubicin from the liposome enabling high concentrations of doxorubicin to be deposited preferentially in and around the targeted tumor.

The HEAT Study

On January 31, 2013, we announced that ThermoDox[®] in combination with RFA did not meet the primary endpoint, progression free survival (PFS), of a Phase III clinical trial enrolling 701 patients with primary liver cancer, which we called the HEAT study. Specifically, we determined, after conferring with the HEAT study independent Data Monitoring Committee, that the HEAT study did not meet the goal of demonstrating persuasive evidence of clinical effectiveness that could form the basis for regulatory approval in the population chosen for the HEAT study. In the trial, ThermoDox[®] was well-tolerated with no unexpected serious adverse events. Following the announcement of the

HEAT study results, we continue to follow patients for overall survival, the secondary endpoint of the HEAT study, on a quarterly basis. We have conducted a comprehensive analysis of the data from the HEAT study to assess the future strategic value of ThermoDox[®]. In April 2013, we announced the deferral of expenses associated with our Phase II study of ThermoDox[®] in combination with RFA for the treatment of colorectal liver metastases (the ABLATE study) until such time as we finalize our plans for the continuation of our development program with ThermoDox[®] in HCC.

The data from the HEAT study post-hoc analysis suggest that ThermoDox[®] may substantially improve overall survival, when compared to the control group, in patients if their lesions undergo standardized RFA treatment for a lesion greater than three centimeters in diameter for 45 minutes or more. Data from seven overall survival sweeps have been conducted since the top line PFS data from the HEAT study were announced in January 2013, with each data set showing progressive improvement in statistical significance. The most recent post-hoc overall survival analysis data from the HEAT study as of January 15, 2015, announced in February 2015, demonstrated that in a large, well-bounded subgroup of patients (n=285, 41 percent of the study patients), the combination of ThermoDox[®] and standardized RFA provided a 59 percent improvement in overall survival compared to optimized RFA alone.

The Hazard Ratio at this latest quarterly overall survival analysis is 0.628 (95 percent CI 0.420 - 0.939) with a p-value of 0.02. These findings apply to patients with single HCC lesions (64.4 percent of the HEAT study population) from both size cohorts of the HEAT study (3-5 cm and 5-7 cm) and represent a subgroup of 285 patients. Median overall survival for this subgroup has not yet been reached and this information should be viewed with caution since it is based on a retrospective analysis of a subgroup. We may choose to end this analysis of overall survival once the median is reached for both arms of the study. We also completed computational modeling with supplementary preclinical animal studies supporting the relationship between heating duration and clinical outcomes.

The OPTIMA Study

On February 24, 2014, we announced that the United States Food and Drug Administration (FDA), after its customary 30-day review period, provided clearance for the OPTIMA study, which is a pivotal, double-blind, placebo-controlled Phase III trial of ThermoDox[®], in combination with standardized RFA, for the treatment of primary liver cancer. The trial design of the OPTIMA study is based on the comprehensive analysis of data from the HEAT study. We launched the OPTIMA study in the first half of 2014. The OPTIMA study was designed with extensive input from globally recognized HCC researchers and clinicians and after receiving formal written consultation from the FDA. The OPTIMA study is expected to enroll up to 550 patients globally at up to 100 sites in the United States, Europe, China and other Asia Pacific regions, and will evaluate ThermoDox[®] in combination with standardized RFA, which will require a minimum of 45 minutes across all investigators and clinical sites for treating lesions three to seven centimeters, versus standardized RFA alone. The primary endpoint for this clinical trial is overall survival, and the secondary endpoints are progression free survival and safety. The statistical plan calls for two interim efficacy analyses by an independent Data Monitoring Committee.

In addition, we met with the China State Food and Drug Administration in 2014 to discuss the inclusion in the OPTIMA study of a minimum patient enrollment requirement to support the ThermoDox[®]'s registration in China. Based on those discussions, we have submitted an application for accelerated approval of the OPTIMA study in China. We also filed a request for a centralized Voluntary Harmonization Procedure (VHP) in Europe, which provides for the assessment of multinational clinical trial applications across several European countries, including Germany, Italy and Spain. Our request for a VHP in Europe was approved on October 23, 2014.

The DIGNITY Study

On July 6, 2015, we announced positive interim data from our ongoing DIGNITY study, which is an open-label, dose-escalating Phase II trial of ThermoDox[®] in patients with recurrent chest wall (RCW) breast cancer. The trial is designed to enroll 20 patients at several clinical sites in the United States and is evaluating ThermoDox[®] in combination with mild hyperthermia. Of the 17 patients enrolled and treated, 13 were eligible for evaluation of efficacy. Based on data available to date, every patient experienced a clinical benefit of their highly refractory disease within the ThermoDox[®] treatment field, with a local response rate of 69 percent observed in the 13 evaluable patients, notably five complete responses, four partial responses and four patients with stable disease. We expect to complete the patient enrollment in this trial in the third quarter of 2015.

Acquisition of EGEN Assets

On June 20, 2014, we completed the acquisition of substantially all of the assets of Egen, Inc., an Alabama corporation, which has changed its company name to EGWU, Inc. after the closing of the acquisition (EGEN), pursuant to an asset purchase agreement dated as of June 6, 2014, by and between EGEN and Celsion (the purchase agreement). CLSN Laboratories, Inc., a Delaware corporation and a wholly-owned subsidiary of Celsion (CLSN Laboratories), acquired all of EGEN's right, title and interest in and to substantially all of the assets of EGEN, including cash and cash equivalents, patents, trademarks and other intellectual property rights, clinical data, certain contracts, licenses and permits, equipment, furniture, office equipment, furnishings, supplies and other tangible personal property. In addition, CLSN Laboratories assumed certain specified liabilities of EGEN, including the liabilities arising out of the acquired contracts and other assets relating to periods after the closing date.

The total purchase price for the asset acquisition is up to \$44.4 million, including potential future earnout payments of up to \$30.4 million contingent upon achievement of certain earnout milestones set forth in the purchase agreement. At the closing, we paid approximately \$3.0 million in cash after the expense adjustment and issued 2,712,188 shares of our common stock to EGEN. The shares of common stock were issued in a private transaction exempt from registration under the Securities Act of 1933, as amended, pursuant to Section 4(2) thereof. In addition, 670,070 shares of common stock were held back by us at the closing and are issuable to EGEN on or after August 2, 2016 pending certain potential adjustments for expenses or in relation to EGEN's indemnification obligations under the purchase agreement.

The earnout payments of up to \$30.4 million will become payable, in cash, shares of our common stock or a combination thereof, at our option, as follows:

\$12.4 million will become payable upon achieving certain specified development milestones relating to an ovarian cancer study of GEN-1 (formerly known as EGEN-001) to be conducted by us or our subsidiary;

\$12.0 million will become payable upon achieving certain specified development milestones relating to a GEN-1 glioblastoma multiforme brain cancer study to be conducted by us or our subsidiary; and

up to \$6.0 million will become payable upon achieving certain specified development milestones relating to the TheraSilence™ technology acquired from EGEN in the acquisition.

Our obligations to make the earnout payments will terminate on the seventh anniversary of the closing date.

In the acquisition, we purchased GEN-1 (formerly known as EGEN-001), a DNA-based immunotherapy for the localized treatment of ovarian and brain cancers, and three platform technologies for the development of treatments for those suffering with difficult-to-treat forms of cancer, novel nucleic acid-based immunotherapies and other anti-cancer DNA or RNA therapies, including TheraPlas™ and TheraSilence™.

GEN-1 is a DNA-based immunotherapeutic product for the localized treatment of ovarian and brain cancers by intraperitoneally administering an Interleukin-12 (IL-12) plasmid formulated with our proprietary TheraPlas™ delivery system. In this DNA-based approach, the immunotherapy is combined with a standard chemotherapy drug, which can potentially achieve better clinical outcomes than with chemotherapy alone. We believe that increases in IL-12 concentrations at tumor sites for several days after a single administration could create a potent immune environment against tumor activity and that a direct killing of the tumor with concomitant use of cytotoxic chemotherapy could result in a more robust and durable antitumor response than chemotherapy alone.

In February 2015, we announced that the FDA had accepted, without comment, a Phase I dose-escalation clinical trial protocol of GEN-1 in combination with the standard of care for the treatment of newly-diagnosed ovarian cancer patients who will undergo neoadjuvant chemotherapy. The clinical trial will seek to identify a safe, tolerable and potentially therapeutically active dose of GEN-1 while maximizing an immune response. The trial is designed to enroll three to six patients per dose level and will evaluate safety and efficacy and attempt to define an optimal dose to carry forward into a Phase II trial. We expect to initiate enrollment for the trial in the second half of 2015 at five to six U.S. clinical centers.

In April 2015, we announced that we plan to expand the ovarian cancer development program to include a Phase I dose escalating trial evaluating GEN-1 in combination with Avastin® and Doxil® in platinum-resistant ovarian cancer patients. We intend to conduct additional preclinical studies to support an Investigational New Drug filing with the FDA for this new Phase I combination study, which will be designed to optimize the dosing regimen for GEN-1 in combination with Avastin®.

In May 2015, we announced results from a Phase Ib trial combining GEN-1 with pegylated doxorubicin. The findings demonstrated an overall clinical benefit at the highest dose level of 86% (PR=29% and SD=57%). GEN-1 was well tolerated, with no dose limiting toxicities and no overlapping toxicities between GEN-1, its subsequent immune system activation and pegylated doxorubicin.

TheraPlas™ Technology Platform

TheraPlas™ is a technology platform for the delivery of DNA and messenger RNA (mRNA) therapeutics via synthetic non-viral carriers and is capable of providing cell transfection for double-stranded DNA plasmids and large therapeutic RNA segments such as mRNA. There are two components of a TheraPlas™ system, including a plasmid DNA or mRNA payload encoding a therapeutic protein and a delivery system. The delivery system is designed to protect the DNA or RNA from degradation and promote trafficking into cells and through intracellular compartments. We designed the delivery system of TheraPlas™ by chemically modifying the low molecular weight polymer to improve its gene transfer activity without increasing toxicity. We believe that TheraPlas™ is a viable alternative to current approaches to gene delivery due to several distinguishing characteristics, including enhanced molecular versatility that allows for complex modifications to improve activity and safety.

TheraSilence™ Technology Platform

TheraSilence™ is a technology platform for the delivery of synthetically-generated inhibitory RNA (RNAi), such as small inhibitory RNAs (siRNAs), microRNAs, microRNA mimics, and related molecules that can regulate protein expression at the transcript level by exploiting endogenous cell mechanisms. RNAi-based therapies have the potential for targeting the disease-related genes with a high degree of specificity, including the target genes that have been widely identified as “non-druggable.” The TheraSilence™ technology seeks to address the primary obstacle to nucleic acid-based therapeutics, which is the efficient delivery of RNAs to target cells. Specifically, a delivery system needs to be able to protect the RNAi from nuclease degradation, transfer the molecule across the cellular membranes and release the material so that it can be available to the endogenous RNA silencing machinery. We have developed proprietary, novel structures that we believe are able to interact with the RNAi molecules forming protective nanoparticles that can be readily taken up into cells. In addition, these systems are chemically flexible and amenable to attaching tissue-targeted ligands, in-vivo stabilizing agents and other functional moieties which can tailor a formulation for a particular application and delivery modality. We believe that these features can provide high specificity for RNAi delivery to select tissue, enhance stability and reduce in-vivo toxicity. On May 21, 2015, we reported data from a preclinical study in which RNA formulated with the TheraSilence™ delivery system resulted in preferential expression level in the lungs in non-human primates and was well tolerated at the two dose levels as determined by safety analysis including complete blood cell count, blood chemistry, histopathology, interferon response and complement activation.

Business Strategy

We have not generated and do not expect to generate any revenue from product sales in the next several years, if at all, other than minimal revenue from the sale of reagent products we acquired from EGEN. An element of our business strategy has been to pursue, as resources permit, the research and development of a range of product candidates for a variety of indications. We may also evaluate licensing cancer products from third parties for cancer treatments to expand our product pipeline. This is intended to allow us to diversify the risks associated with our research and development expenditures. However, there can be no assurance that we will be able to develop and maintain a broad range of product candidates. To the extent we are unable to maintain a broad range of product candidates, our dependence on the success of one or a few product candidates would increase and results such as those announced in relation to the HEAT study on January 31, 2013 will have a more significant impact on our financial prospects, financial condition and market value. We will assess our product pipeline and research and development priorities. We may also consider and evaluate strategic alternatives, including investment in, or acquisition of, complementary businesses, technologies or products. As demonstrated by the HEAT study results, drug research and development is an inherently uncertain process and there is a high risk of failure at every stage prior to approval. The timing and the outcome of clinical results is extremely difficult to predict. Clinical development successes and failures can have a disproportionate positive or negative impact on our scientific and medical prospects, financial prospects, financial condition and market value.

Our current business strategy includes the possibility of entering into collaborative arrangements with third parties to complete the development and commercialization of our product candidates. In the event that third parties take over the clinical trial process for one or more of our product candidates, the estimated completion date would largely be under the control of that third party rather than us. We cannot forecast with any degree of certainty which proprietary products or indications, if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect our development plan or capital requirements. We may also apply for subsidies, grants or government or agency-sponsored studies that could reduce our development costs.

As a result of the uncertainties discussed above, among others, we are unable to estimate the duration and completion costs of our research and development projects or when, if ever, and to what extent we will receive cash inflows from the commercialization and sale of a product. Our inability to complete our research and development projects in a timely manner or to obtain positive results in our clinical trials, as well as any failure to enter into collaborative agreements when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. While our estimated future capital requirements are uncertain and could increase or decrease as a result of many factors, including the extent to which we choose to advance our research, development and clinical trials or whether we are in a position to pursue manufacturing or commercialization activities, it is clear we will need significant additional capital to develop our product candidates through clinical development, manufacturing and commercialization. We do not know whether we will be able to access additional capital when needed or on terms favorable to us or our stockholders. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

Corporate Information

We were founded in 1982 and are a Delaware corporation. Our shares of common stock trade on The NASDAQ Capital Market under the symbol "CLSN." Our principal executive offices are located at 997 Lenox Drive, Suite 100, Lawrenceville, New Jersey 08648. Our telephone number is (609) 896-9100 and our website is www.celsion.com. The information available on or through our website is not part of or incorporated by reference into, this prospectus and should not be relied upon.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider and evaluate all of the information contained in this prospectus, any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus and any accompanying prospectus supplement before you decide to purchase our securities. In particular, you should carefully consider and evaluate the risks and uncertainties described in “Part I — Item 1A. Risk Factors” of our most recent Annual Report on Form 10-K, as updated by the additional risks and uncertainties set forth in our most recent Quarterly Report on Form 10-Q and in other filings we make with the SEC, as well as the risks and uncertainties described under the heading “Risk Factors” contained in the applicable prospectus supplement or in any other document incorporated by reference into this prospectus. Any of the risks and uncertainties set forth therein could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the trading price or value of our securities. As a result, you could lose all or part of your investment.

RATIO OF EARNINGS TO FIXED CHARGES**(In thousands)**

Set forth below is information concerning our ratio of earnings to fixed charges for the periods indicated. For purposes of calculating this ratio, earnings consist of net income from continuing operations before income taxes, fixed charges less capitalized interest. Fixed charges consist of interest expense and estimated interest portion of rentals.

For the periods indicated below, we had no outstanding shares of preferred stock with required dividend payments. Therefore, the ratios of earnings to combined fixed charges are identical to the ratios presented in the table below.

	Year Ended December 31,				
	2014	2013	2012	2011	2010
Ratio of earnings to fixed charges	*	*	*	*	*
Deficiency of earnings available to cover fixed charges	\$24,715	\$15,763	\$22,360	\$23,019	\$19,637

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, 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 research and development, clinical trials, manufacture and commercialization of our lead product candidate, ThermoDox[®], and other products, including GEN-1, and to fund research and development of our technologies, working capital, repaying, redeeming or repurchasing debt, 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, interest-bearing instruments or other investment-grade securities, certificates of deposits or short-term U.S. government 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.

DIVIDEND POLICY

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

GENERAL DESCRIPTION OF SECURITIES

We may offer shares of common or preferred stock, various series of debt securities, warrants or other rights to purchase common stock or preferred stock, or units consisting of combinations of the foregoing, in each case from time to time under this prospectus, together with any applicable prospectus supplement, at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. At the time we offer a type or series of securities, we will provide a prospectus supplement describing the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

voting or other rights;

rates and times of payment of interest, dividends or other payments;

original issue discount;

maturity;

ranking;

restrictive covenants;

redemption, conversion, exercise, exchange, settlement or sinking fund terms, including prices or rates, and any provisions for changes to or adjustments in such prices or rates and in the securities or other property receivable upon conversion, exercise, exchange or settlement;

any securities exchange or market listing arrangements; and

important U.S. federal income tax considerations.

This prospectus may not be used to offer or sell securities unless accompanied by a prospectus supplement. The prospectus supplement may add, update or change information contained in this prospectus or in documents incorporated by reference in this prospectus. We urge you to read the prospectus supplement related to any securities being offered.

We may sell the securities directly to or through underwriters, dealers or agents. We and our underwriters, dealers or agents reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement (a) the names of the underwriters or agents and applicable fees, discounts and commissions to be paid to them, (b) details regarding over-allotment options, if any, and (c) net proceeds to us.

The following descriptions are not complete and may not contain all the information you should consider before investing in any securities we may offer hereunder; they are summarized from, and qualified by reference to, our amended and restated certificate of incorporation, bylaws and the other documents referred to in the descriptions, all of which are or will be publicly filed with the SEC, as applicable. See “Where You Can Find More Information.”

DESCRIPTION OF CAPITAL STOCK

General

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. As of September 3, 2015, there were 23,027,988 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, as amended (DGCL), 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, 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 titled “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 our board of directors 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 our 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.

Preferred Stock

Pursuant to our certificate of incorporation, our board of directors 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 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 our certificate of incorporation provides otherwise, the number of authorized shares of the class or 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 in the applicable certificate of designation.

Our board of directors 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

Certificate of Incorporation and Bylaws

A number of provisions of our certificate of incorporation and bylaws concern matters of corporate governance and the rights of our stockholders. Provisions that grant our board of directors 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 of directors, 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 of directors 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 of directors believes that these provisions are appropriate to protect our interests and the interests of our stockholders.

Classification of Board; No Cumulative Voting. Our certificate of incorporation and bylaws provide for our board of directors 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.

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 of directors. A special meeting of our stockholders may be called at any time by our board of directors, the chairman of our board of directors or the president. Our bylaws provide that (i) our board of directors can fix separate record dates for determining stockholders entitled to receive notice of a stockholder meeting and for determining stockholders entitled to vote at the meeting; (ii) we may hold a stockholder meeting by means of remote communications; (iii) any stockholder seeking to have the stockholders authorize or take corporate action by written consent shall, by written notice to the secretary of the Company, request that the board fix a record date and the board shall adopt a resolution fixing the record date in all events within ten calendar days after a request is received; and (iv) a written consent of stockholders shall not be effective unless a written consent signed by a sufficient number of stockholders to take such action is received by us within 60 calendar days of the earliest dated written consent received.

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, or mailed and received by, the secretary of the Company at our principal executive offices not later than the close of business on the 90th calendar day, nor earlier than the close of business on the 120th calendar day in advance of the date specified in the Company's proxy statement released to stockholders in connection with the previous year's annual meeting of stockholders. If the date of the annual meeting is more than 30 calendar days before or after such anniversary date, notice by the stockholder to be timely must be so not earlier than the close of business on the 120th calendar day in advance of such date of annual meeting and not later than the close of business on the later of the 90th calendar day in advance of such date of annual meeting or the tenth calendar day following the date on which public announcement of the date of the meeting is made. In no event shall the public announcement of an adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of an advance notice by any stockholder. Any stockholder that proposes director nominations or other business must be a stockholder of record at the time the advance notice is delivered by such stockholder to us and entitled to vote at the meeting. 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. Unless otherwise required by law, any director nomination or other business shall not be made or transacted if the stockholder (or a qualified representative of the stockholder) does not appear at the meeting to present the director nominee or other proposed business.

Filling of Board Vacancies. Our certificate of incorporation and bylaws provide that the authorized size of our board of directors shall be determined by the board by board resolution from time to time and that our board of directors has

the exclusive power to fill any vacancies and newly created directorships resulting from any increase in the authorized number of directors and the stockholders do not have the power to fill such vacancies. Vacancies in our board of directors and newly created directorships resulting from any increase in the authorized number of directors on our board of directors may be filled by a majority of the directors remaining in office, even though that number may be less than a quorum of our board of directors, 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 our stockholders 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 amended or repealed, or new bylaws may be adopted, by either our board of directors or the affirmative vote of at least 66 2/3 percent of the voting power of our outstanding shares of capital stock.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the DGCL, 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 percent 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) pursuant to 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; and

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 $66 \frac{2}{3}$ percent 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 ten percent 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; and

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 of the DGCL defines an “interested stockholder” as an entity or person who, together with the entity’s or person’s affiliates and associates, beneficially owns, or is an affiliate of the corporation and within three years prior to the time of determination of interested stockholder status did own, 15 percent or more of the outstanding voting stock of the corporation.

A Delaware corporation may “opt out” of these provisions with an express provision in its certificate of incorporation. We have not opted out of these provisions, which may as a result, discourage or prevent mergers or other takeover or change of control attempts of us.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC (AST), located at 6201 15th Avenue, Brooklyn, New York 11219. AST's phone number is (800) 937-5449.

NASDAQ Capital Market Listing

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

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as senior, subordinated or junior subordinated, convertible or non-convertible and secured or unsecured debt. Any senior debt securities will rank equally with any unsubordinated debt. Subordinated debt securities will rank equally with any other subordinated debt of the same ranking we may issue. Convertible debt securities will be convertible into or exchangeable for our common stock or other securities at predetermined conversion rates, and conversion may be mandatory or at the holder's option.

Debt securities will be issued under one or more indentures—contracts between us and a national banking association or other eligible party acting as trustee. Following is a summary of certain general features of debt securities we may issue; we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement, which may differ from the terms we describe below. You should read the prospectus supplements, any free writing prospectus we may authorize and the indentures, supplemental indentures and forms of debt securities relating to any series of debt securities we may offer.

General. Except as we may otherwise provide in a prospectus supplement, the relevant indenture will provide that debt securities may be issued from time to time in one or more series. The indenture will not limit the amount of debt securities that may be issued thereunder, and will provide that the specific terms of any series of debt securities shall be set forth in, or determined pursuant to, an authorizing resolution, an officers' certificate or a supplemental indenture, if any, relating to such series.

We will describe in each prospectus supplement the following terms relating to any series of debt securities:

the title or designation;

whether they will be secured or unsecured, and the terms of any security;

whether the debt securities will be subject to subordination, and any terms thereof;

any limit upon the aggregate principal amount;

the date or dates on which the debt securities may be issued and on which we will pay the principal;

the interest rate, which may be fixed or variable, or the method for determining the rate, the date interest will begin to accrue, the date or dates interest will be payable and the record dates for interest payment dates or the method for determining them;

the manner in which the amounts of payment of principal of, premium or interest on the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies other than that in which the debt securities are denominated or designated to be payable or by reference to a commodity, commodity index, stock exchange index or financial index;

the currency of denomination;

if payments of principal of, premium or interest will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to these payments will be determined;

the place or places where the principal of, premium, and interest will be payable, where debt securities of any series may be presented for registration of transfer, exchange or conversion, and where notices and demands to or upon the Company in respect of the debt securities may be made;

the form of consideration in which principal of, premium or interest will be paid;

the terms and conditions upon which we may redeem the debt securities;

any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund, amortization or analogous provisions or at the option of a holder;

the dates on which and the price or prices at which we will repurchase the debt securities at the option of holders and other detailed terms and provisions of these obligations;

the denominations in which the debt securities will be issued, if other than denominations of \$1,000 and any integral multiple thereof;

the portion of principal amount payable upon declaration of acceleration of the maturity date, if other than the principal amount;

whether the debt securities are to be issued at any original issuance discount and the amount of discount with which they may be issued;

whether the debt securities will be issued in certificated or global form and, in such case, the depositary and the terms and conditions, if any, upon which interests in such global security or securities may be exchanged in whole or in part for the individual securities represented thereby;

provisions, if any, for defeasance in whole or in part and any addition or change to provisions related to satisfaction and discharge;

the form of the debt securities;

the terms and conditions upon which convertible debt securities will be convertible or exchangeable into securities or property of the Company or another person, if at all, and any additions or changes, if any, to permit or facilitate the same;

provisions, if any, granting special rights to holders upon the occurrence of specified events;

any restriction or condition on transferability;

any addition or change in the provisions related to compensation and reimbursement of the trustee;

any addition to or change in the events of default described in this prospectus or in the indenture and any change in the acceleration provisions so described;

whether the debt securities will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;

whether we will be restricted from incurring any additional indebtedness;

any addition to or change in the covenants described in this prospectus or in the indenture, including terms of any restrictive covenants; and

any other terms which may modify or delete any provision of the indenture.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the U.S. federal income tax considerations and other special considerations applicable to any debt securities in the applicable prospectus supplement.

Conversion or Exchange Rights. We will set forth in the prospectus supplement the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock or other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or other securities that the holders of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale; No Protection in Event of a Change of Control or Highly Leveraged Transaction. Except as we may otherwise provide in a prospectus supplement, the indenture will provide that we may not merge or consolidate with or into another entity, or sell other than for cash or lease all or substantially all our assets to another entity, or purchase all or substantially all the assets of another entity unless we are the surviving entity or, if we are not the surviving entity, the successor, transferee or lessee entity expressly assumes all of our obligations under the indenture or the debt securities, as appropriate.

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions that may afford holders additional protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect them.

Events of Default Under the Indenture. Except as we may otherwise provide in a prospectus supplement, the following will be events of default under the indenture with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;

if we fail to pay the principal, or premium, if any, when due whether by maturity or called for redemption;

if we fail to pay a sinking fund installment, if any, when due and our failure continues for 30 days;

if we fail to observe or perform any other covenant relating to the debt securities, other than a covenant specifically relating to and for the benefit of holders of another series of debt securities, and our failure continues for 90 days after we receive written notice from the debenture trustee or holders of not less than a majority in aggregate principal amount of the outstanding series; and

if specified events of bankruptcy, insolvency or reorganization occur as to the Company.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) will necessarily constitute an event of default with respect to any other series. The occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

Except as we may otherwise provide in a prospectus supplement, if an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding series may, by a notice in writing to us (and to the debenture trustee if given by the holders), declare to be due and payable immediately the principal (or, if the debt securities are discount securities, that portion of the principal amount as may be specified in the terms of such securities) of and premium and accrued and unpaid interest, if any, on all such debt securities. Before a judgment or decree for payment of the money due has been obtained with respect to any series, the holders of a majority in principal amount of that series (or, at a meeting of holders at which a quorum is present, the holders of a majority in principal amount represented at such meeting) may rescind and annul the acceleration if all events of default, other than the non-payment of accelerated principal, premium, if any, and interest, if any, have been cured or waived as provided in the applicable indenture (including payments or deposits in respect of principal, premium or interest that had become due other than as a result of such acceleration) and the Company has deposited with the indenture trustee or paying agent a sum sufficient to pay all amounts owed to the indenture trustee under the indenture, all arrears of interest, if any, and the principal and premium, if any, on the debt securities that have become due other than by such acceleration. We refer you to the relevant prospectus supplement relating to any discount securities for the particular provisions relating to acceleration of a portion of the principal amount thereof upon the occurrence of an event of default.

Subject to the terms of the indenture, and except as we may otherwise provide in a prospectus supplement, if an event of default under the indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to that series, provided that, subject to the terms of the indenture, the debenture trustee need not take any action that it believes, upon the advice of counsel, might involve it in personal liability or might be unduly prejudicial to holders not involved in the proceeding.

Except as we may otherwise provide in a prospectus supplement, a holder of the debt securities of any series will only have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies if:

the holder previously has given written notice to the debenture trustee of a continuing event of default with respect to that series;

the holders of at least a majority in aggregate principal amount outstanding of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and

the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount outstanding of that series (or at a meeting of holders at which a quorum is present, the holders of a majority in principal amount of such series represented at such meeting) other conflicting directions within 60 days after the notice, request and offer.

Except as we may otherwise provide in a prospectus supplement, these limitations will not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, them.

We will periodically file statements with the applicable debenture trustee regarding our compliance with specified covenants in the applicable indenture.

Modification of Indenture; Waiver. Except as we may otherwise provide in a prospectus supplement, the debenture trustee and the Company may, without the consent of any holders, execute a supplemental indenture to change the applicable indenture with respect to specific matters, including, among other things:

to surrender any right or power conferred upon the Company;

to provide, change or eliminate any restrictions on payment of principal of or premium, if any; provided that any such action shall not adversely affect the interests of the holders of debt securities of any series in any material respect;

to change or eliminate any of the provisions of the indenture; provided that any such change or elimination shall become effective only when there is no outstanding debt security created prior to the execution of such supplemental indenture that is entitled to the benefit of such provision and as to which such supplemental indenture would apply;

to evidence the succession of another entity to the Company;

to evidence and provide for the acceptance of appointment by a successor trustee with respect to one or more series of debt securities and to add or change provisions of the indenture to facilitate the administration of the trusts thereunder by more than one trustee;

to cure any ambiguity, mistake, manifest error, omission, defect or inconsistency in the indenture or to conform the text of any provision in the indenture or in any supplemental indenture to any description thereof in the applicable section of a prospectus, prospectus supplement or other offering document that was intended to be a verbatim recitation of a provision of the indenture or of any supplemental indenture;

to add to or change or eliminate any provision of the indenture as shall be necessary or desirable in accordance with any amendments to the U.S. Trust Indenture Act of 1939;

to make any change in any series of debt securities that does not adversely affect in any material respect the interests of the holders thereof; and

to supplement any of the provisions of the indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of debt securities; provided that any such action shall not adversely affect the interests of holders of any debt securities.

In addition, and except as we may otherwise provide in a prospectus supplement, under the indenture the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount outstanding (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount represented at such meeting) that is affected. The debenture trustee and the Company may, however, make the following changes only with the consent of each holder of any outstanding debt securities affected:

extending the fixed maturity;

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon redemption;

reducing the principal amount of discount securities payable upon acceleration of maturity;

making the principal of or premium or interest payable in currency other than that stated;

impairing the right to institute suit for the enforcement of any payment on or after the fixed maturity date;

materially adversely affecting the economic terms of any right to convert or exchange; and

reducing the percentage of debt securities, the holders of which are required to consent to any amendment or waiver; or modifying, without the written consent of the trustee, the rights, duties or immunities of the trustee.

Except for certain specified provisions, and except as we may otherwise provide in a prospectus supplement, the holders of at least a majority in principal amount of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount represented at such meeting) may, on behalf of the holders of all debt securities of that series, waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of all such holders, waive any past default under the indenture with respect to that series and its consequences, other than a default in the payment of the principal of, premium or any interest; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge. Except as we may otherwise provide in a prospectus supplement, the indenture will provide that we can elect to be discharged from our obligations with respect to one or more series of debt securities. In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the debt securities of the affected series on the dates payments are due.

Form, Exchange and Transfer. Except as we may otherwise provide in a prospectus supplement, we will issue debt securities only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. Except as we may otherwise provide in a prospectus supplement, the indenture will provide that we may issue debt securities in temporary or permanent global form and as book-entry securities that will be deposited with a depository named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder will be able to exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities or the indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities

of each series.

Except as we may otherwise provide in a prospectus supplement, if we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee. The debenture trustee, other than during the occurrence and continuance of an event of default under the indenture, will undertake to perform only those duties as are specifically set forth in the indenture. Upon an event of default, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee will be under no obligation to exercise any of the powers given it by the indenture at the request of any holder unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents. Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of interest on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

Unless we otherwise indicate in the applicable prospectus supplement, we will pay principal of and any premium and interest at the office of the indenture trustee or, at the option of the Company, by check payable to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee our sole paying agent for payments. We will name in the applicable prospectus supplement any other paying agents that we initially designate. We will maintain a paying agent in each place of payment.

All money we pay to a paying agent or the debenture trustee for the payment of principal or any premium or interest which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law. The indenture and the debt securities will be governed and construed in accordance with the laws of the State of New York.

No Personal Liability of Directors, Officers, Employees and Stockholders. No incorporator, stockholder, employee, agent, officer, director or subsidiary of ours will have any liability for any obligations of ours or, due to the creation of any indebtedness under the debt securities, the indentures or supplemental indentures. The indentures provide that all such liability is expressly waived and released as a condition of, and as consideration for, the execution of such indentures and the issuance of the debt securities.

DESCRIPTION OF WARRANTS, OTHER RIGHTS AND UNITS

We may from time to time issue warrants or other rights (together, Rights), in one or more series, for the purchase of common stock or preferred stock. We may issue Rights independently or together with such securities, and such Rights may be attached to or separate from them. Rights will be evidenced by a Rights certificate issued under one or more Rights agreements between us and a Rights agent which will act solely as our agent in connection with the Rights and will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of Rights. We may issue securities in units (Units), each consisting of two or more types of securities. For example, we might issue Units consisting of a combination of common stock and warrants to purchase common stock. If we issue Units, the prospectus supplement relating to the Units will contain the information described above with regard to each of the securities that is a component of the Units. In addition, the prospectus supplement relating to the Units will describe the terms of any Units we issue. The forms of any such certificates and agreements will be filed as exhibits to the registration statement of which this prospectus is a part by amendment thereof or as exhibits to a Current Report on Form 8-K incorporated herein by reference, and the accompanying prospectus supplement and such forms may add, update or change the terms and conditions of the Rights or Units described in this prospectus. You should read the prospectus supplements, Rights agreements and Rights certificates that contain the terms of the Rights in their entirety.

The particular terms of each issue of Rights or Units will be described in the applicable prospectus supplement, including, as applicable:

the title of the Rights or Units;

any initial offering price;

the title, aggregate principal amount or number and terms of the securities purchasable upon exercise of the Rights;

the principal amount or number of securities purchasable upon exercise of each Right and the price at which that principal amount or number may be purchased upon exercise of each Right;

the currency or currency units in which any offering price and any exercise price are payable;

the title and terms of any related securities with which the Rights are issued and the number of the Rights issued with each security;

any date on and after which the Rights or Units and the related securities will be separately transferable;

any minimum or maximum number of Rights that may be exercised at any one time;

the date on which the right to exercise the Rights will commence and the date on which the right will expire;

a discussion of U.S. federal income tax, accounting or other considerations applicable to the Rights or Units;

whether the Rights represented by the Rights certificates, if applicable, will be issued in registered or bearer form and, if registered, where they may be transferred and registered;

any anti-dilution provisions of the Rights or Units;

any redemption or call provisions applicable to the Rights;

any provisions for changes to or adjustments in the exercise price of any Rights; and

any additional terms of the Rights or Units, including terms, procedures and limitations relating to exchange and exercise of the Rights or Units.

Rights certificates will be exchangeable for new Rights certificates of different denominations and, if in registered form, may be presented for registration of transfer, and Rights may be exercised, at the corporate trust office of the Rights agent or any other office indicated in the related prospectus supplement. Before the exercise of Rights, holders of Rights will not be entitled to payments of any dividends, principal, premium or interest on securities purchasable upon exercise of the Rights, to vote, consent or receive any notice as a holder of and in respect of any such securities or to enforce any covenants in any indenture, or to exercise any other rights whatsoever as a holder of securities purchasable upon exercise of the Rights.

PLAN OF DISTRIBUTION

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; or

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;

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 reallocated 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 reallocated 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 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 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 Capital Market may engage in passive market making transactions in the common stock on The NASDAQ Capital 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 hereby will be passed upon by Sidley Austin LLP, Palo Alto, California.

EXPERTS

Stegman & Company, an independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014, as set forth in their report, which is incorporated by reference in this prospectus. Our financial statements are incorporated herein by reference in reliance on Stegman & Company's report, given on their authority as experts in accounting and auditing.

Anglin, Reichmann, Snellgrove & Armstrong P.C., an independent registered public accounting firm, has audited the financial statements of EGWU, Inc. (formerly known as Egen, Inc.), an Alabama corporation, as of and for the year ended June 30, 2013 and for the period from March 2, 2002 (date of inception) to June 30, 2013, and as of and for the year ended June 30, 2012, as set forth in their reports, which appear in Amendment No. 1 to our Current Report on Form 8-K/A filed on August 25, 2014 and are incorporated herein by reference in Amendment No. 2 to our Current Report on Form 8-K/A filed on May 29, 2015 and this prospectus. Such financial statements are incorporated herein by reference in reliance on the reports of Anglin, Reichmann, Snellgrove & Armstrong P.C., given on their authority as experts in accounting and auditing.

2,311,764 Shares of Common Stock

Pre-Funded Series B Warrants to purchase 2,100,000 Shares of Common Stock

2,100,000 shares of Common Stock underlying the Pre-Funded Series B Warrants

Placement Agent

H.C. Wainwright & Co.

PROSPECTUS SUPPLEMENT

June 13, 2016