

Celsion CORP
Form S-3/A
September 16, 2014

As filed with the Securities and Exchange Commission on September 16, 2014

Registration No. 333-193936

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

AMENDMENT NO. 1

TO

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CELSION CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

52-1256615

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

997 Lenox Drive, Suite 100

Lawrenceville, New Jersey 08648

(609) 896-9100

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

Michael H. Tardugno

President and Chief Executive Officer

997 Lenox Drive, Suite 100

Lawrenceville, New Jersey 08648

(609) 896-9100

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

Copies to:

Jennifer A. DePalma, Esq.

O'Melveny & Myers LLP

2765 Sand Hill Road

Menlo Park, California 94025

(650) 473-2600

Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

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

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount To be registered⁽¹⁾ | Proposed maximum offering price per share⁽²⁾ | Proposed maximum aggregate offering price⁽²⁾ | Amount of registration fee⁽³⁾ |
|---|--|--|--|---|
| Common Stock, par value \$0.01 per share, underlying a warrant to purchase common stock | 194,986 | \$3.14 | \$612,256.04 | \$78.86 |

(1) Represents a maximum of 194,986 shares of common stock, par value \$0.01 per share, of the registrant, to be sold by the

selling
stockholder
upon exercise of
an outstanding
warrant held by
the selling
stockholder at an
exercise price of
\$3.59 per share,
subject to
adjustments set
forth therein. In
accordance with
Rule 416 under
the Securities
Act of 1933, as
amended, this
registration
statement also
covers an
indeterminate
number of
additional shares
of common
stock of the
registrant that
may become
issuable in
connection with
any
proportionate
adjustment for
any stock splits,
stock
combinations,
stock dividends,
recapitalizations
or similar events
with respect to
the registrant's
common stock.

- (2) Estimated solely
for the purpose
of computing the
amount of the
registration fee
for the shares of
common stock
being registered
in accordance
with Rule 457(c)

under the Securities Act of 1933, as amended, based upon the average of the high and low sale prices for a share of common stock of the registrant as reported on The NASDAQ Capital Market on September 15, 2014.

(3) Paid in connection with the initial filing of this registration statement.

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

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

SUBJECT TO COMPLETION, DATED SEPTEMBER 16, 2014

PROSPECTUS

194,986 Shares of Common Stock

Issuable upon Exercise of a Warrant Held by Hercules Technology Growth Capital, Inc.

Received in Connection with a Term Loan to Celsion Corporation

This prospectus relates to the resale from time to time of 194,986 shares of our common stock, par value \$0.01 per share, issuable upon exercise of an outstanding warrant held by Hercules Technology Growth Capital, Inc. (Hercules), which is the selling stockholder identified in this prospectus. The warrant was issued by us to Hercules pursuant to the warrant agreement to purchase shares of common stock entered into on November 25, 2013, by and between Hercules and us in connection with a secured term loan provided by Hercules to us. As of the date of this prospectus, all of the 194,986 shares of common stock are exercisable by Hercules. The selling stockholder or its transferees, donees, pledgees, assignees and successors-in-interest may offer and sell the shares in public or private transactions or both. These sales may occur at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market price or at negotiated prices.

The selling stockholder may sell all or a portion of the shares through underwriters, brokers-dealers or agents. See the section titled "Plan of Distribution" in this prospectus for a more complete description of the ways in which the shares may be sold. We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale of shares of common stock by the selling stockholder. However, we will receive proceeds from the cash

exercise of the warrant which, if exercised in cash with respect to all of the 194,986 shares of common stock, would result in gross proceeds of up to \$699,999.74 to us. The warrant contains a net exercise provision, pursuant to which Hercules can, in lieu of payment of the exercise price in cash, surrender the warrant and receive a number of shares of our common stock equal to the product of the number of shares of our common stock requested to be issued pursuant to the exercise multiplied by a fraction, the numerator of which is the then-current fair market value of our common stock minus the exercise price and the denominator of which is the then-current fair market value of our common stock. We have agreed to bear the expenses in connection with the registration of the shares of common stock to be offered by this prospectus by the selling stockholder other than any broker or underwriter fees, discounts or commissions, which will be borne by the selling stockholder.

Our common stock is listed on The NASDAQ Capital Market under the symbol "CLSN." On September 15, 2014, the last reported closing sale price of our common stock on The NASDAQ Capital Market was \$3.06 per share.

Investing in our common stock involves a high degree of risk. Before making an investment decision, please read "Risk Factors" on page 8 of this prospectus.

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

The date of this prospectus is September 16, 2014.

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 | 4 |
| THE OFFERING | 7 |
| RISK FACTORS | 8 |
| USE OF PROCEEDS | 9 |
| DIVIDEND POLICY | 10 |
| DESCRIPTION OF CAPITAL STOCK | 11 |
| SELLING STOCKHOLDER | 14 |
| PLAN OF DISTRIBUTION | 15 |
| LEGAL MATTERS | 17 |
| EXPERTS | 17 |

ABOUT THIS PROSPECTUS

This prospectus relates to the resale from time to time of 194,986 shares of our common stock, par value \$0.01 per share, issuable upon exercise of an outstanding warrant held by Hercules Technology Growth Capital, Inc. (Hercules), which is the selling stockholder identified in this prospectus, including its transferees, donees, pledgees, assignees and successors-in-interest. The warrant was issued by us to the selling stockholder on November 25, 2013, in connection with a secured term loan provided by Hercules to us. As of the date of this prospectus, all of the 194,986 shares of common stock are exercisable by Hercules. We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale of shares of common stock by the selling stockholder.

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. It omits some of the information contained in the registration statement and reference is made to the registration statement for further information with regard to us and the securities being offered by the selling stockholder. Any statement contained in the prospectus concerning the provisions of any document filed as an exhibit to the registration statement or otherwise filed with the SEC is not necessarily complete, and in each instance, reference is made to the copy of the document filed.

You should read this prospectus, any documents that we incorporate by reference in this prospectus and the additional information described below under “Where You Can Find More Information” and “Information Incorporated By Reference” before making an investment decision. You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

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

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 (the 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 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

SEC rules allow us to “incorporate by reference” into this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference 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 SEC rules:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 filed with the SEC on March 13, 2014;

Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2014 filed with the SEC on May 8, 2014;

Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2014 filed with the SEC on August 7, 2014;

Our Current Reports on Form 8-K filed with the SEC on January 15, 2014, January 21, 2014, June 10, 2014, June 20, 2014 (as amended by Amendment No. 1 on Form 8-K/A filed with the SEC on August 25, 2014) and June 23, 2014;

Our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 30, 2014; 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 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 Securities and Exchange Commission 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, 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 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 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.

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 development for the treatment of hepatocellular carcinoma (HCC), also known as primary liver cancer. Our pipeline also includes 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[®]

Our lead product, ThermoDox[®], is being evaluated in a Phase III clinical trial, in combination with radiofrequency ablation (RFA), for primary liver cancer (the HEAT study), a pivotal Phase III clinical trial, in combination with a standardized RFA protocol, 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.

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 tumors undergo optimal RFA treatment. Data from five overall survival sweeps have been conducted since the top line PFS data from the HEAT study were announced in January 2013. In July 2014, we announced that the latest overall survival data from the post-hoc analysis of results from the HEAT study support continued clinical development through a prospective pivotal Phase III Study. As reported on July 28, 2014, data from the latest HEAT study post-hoc analysis as of June 30, 2014 suggest that ThermoDox[®] may markedly improve overall survival, compared to RFA control, in patients whose lesions undergo RFA treatment for 45 minutes or more. These findings apply to patients with single HCC lesions, which represent 64.4 percent of the HEAT study population from both size cohorts of the HEAT study (3-5 cm and 5-7 cm). For a subgroup of 285 patients, representing 41 percent of the patients in the HEAT study, clinical results indicate a 57 percent improvement in overall survival, a Hazard Ratio of 0.639 (95 percent CI 0.419 – 0.974), and a p-Value of 0.037. 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 that has not reached its median point for the overall survival analysis. We may choose to end this analysis of overall survival once the median is reached for either or 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 RFA, in 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 and enrolled the first patients in the trial on September 2, 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 approximately 550 patients globally, with up to 100 sites in the United States, Europe, China and other Asia Pacific regions, and will evaluate ThermoDox[®] in combination with RFA, which will be standardized to a minimum of 45 minutes across all investigators and 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 endpoint is 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 are submitting an application for accelerated approval of the study in China. We plan to expand our clinical site footprint in Europe and will meet with the European Medicines Agency during 2014. We have filed a request for a Voluntary Harmonization Procedure (VHP) in Europe, which provides for the assessment of multinational clinical trial applications across several European countries, including Germany, France and Spain.

The DIGNITY Study

On July 24, 2014, we announced 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 breast cancer (RCWBC). 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 13 patients enrolled and treated, ten were eligible for evaluation of efficacy. Based on data available to date, 60 percent of patients experienced a stabilization of their highly refractory disease with a local response rate of 50 percent observed in the ten evaluable patients, notably three complete responses, two partial responses and one patient with stable disease.

These data are consistent with the previously reported combined clinical data from two Phase I trials in patients with RCWBC, namely our Phase I DIGNITY study and the Phase I trial of ThermoDox® plus hyperthermia for RCWBC sponsored by the Duke University in December 2013. The two similarly designed Phase I studies enrolled patients with highly resistant tumors found on the chest wall and who had progressed on previous therapy including chemotherapy, radiation therapy and hormone therapy. There were 29 patients treated in the two trials, including eleven patients in our Phase I DIGNITY study and 18 patients in the Phase I trial sponsored by the Duke University. Of the 29 patients enrolled and treated, 23 were eligible for evaluation of efficacy. A local response rate of over 60 percent was reported in 14 of the 23 evaluable patients with five complete responses and nine partial responses.

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 EGEN-001 ovarian cancer study to be conducted by us or our subsidiary;

\$12.0 million will become payable upon achieving certain specified development milestones relating to an EGEN-001 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 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®. EGEN-001 is currently in an early stage of clinical development for the treatment of ovarian cancer, and the delivery technology platforms that we purchased from EGEN are in preclinical stages of development.

EGEN-001

EGEN-001 is a DNA-based immunotherapeutic product for the localized treatment of ovarian and brain cancers. EGEN-001 is currently in Phase Ib trial for the treatment of patients with ovarian cancer and preclinical studies for the treatment of patients with brain cancers. EGEN-001 comprises an interleukin-12 (IL-12) gene plasmid and a biocompatible delivery lipopolymer developed based on our TheraPlas® technology platform, formulated into pharmaceutically acceptable nanoparticles. IL-12 is a small protein that mediates cytotoxic activity by activation of both innate and adaptive immunity and tumor anti-angiogenesis. EGEN-001 is designed to deliver IL-12 locally at tumor site for several days after a single injection without significant systemic toxicity. Pre-clinical and clinical studies have shown that EGEN-001 can inhibit tumors when administered either as a monotherapy and in combination with standard chemotherapy.

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. TheraPlas® technology platform comprises an expression plasmid encoding a therapeutic DNA and a biocompatible plasmid delivery system that is designed to protect the plasmid from degradation and promote plasmid trafficking into cells and translocation 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 small inhibitory RNAs (siRNAs), microRNAs, microRNA mimics, and related molecules that can regulate protein expression by exploiting endogenous cell mechanisms. The primary obstacle to nucleic acid-based therapeutics is the efficient delivery to target cells.

Specifically, the potential for RNA-based therapeutics, which can result in the sequence-specific reduction of gene expression, to be realized depends primarily on the degree to which the RNA molecules are able to enter cells and become available to the endogenous RNA silencing machinery. We have developed proprietary, novel structures that are custom designed and synthesized to allow the flexibility of chemistry modifications and potential adaptations such as attachment of tissue-targeted ligands, in vivo stabilizing agents and other unique formulations. We believe that these features provide high specificity for RNAi delivery to select tissue, enhance stability and reduce in vivo toxicity. In-vivo proof-of-concept studies have shown the ability to deliver anti-vascular endothelial receptor siRNA into mice to 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 and compromised cardiac function associated with the disease. This suggests that this delivery system can effectively deliver numerous potentially therapeutic molecular targets and may have application for treating a variety of lung diseases.

We do not expect to realize 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. Further, there can be no assurance that we will be able to develop and maintain a broad range of product candidates. To the extent that we are dependent on the success of one or a few product candidates, 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. As demonstrated by the HEAT study results in January 2013, 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, results of operations, financial condition and market value.

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 and should not be relied upon.

THE OFFERING

This prospectus relates to the resale from time to time of 194,986 shares of our common stock, par value \$0.01 per share, issuable upon exercise of an outstanding warrant by Hercules Technology Growth Capital, Inc. (Hercules), the selling stockholder identified in this prospectus, including its transferees, donees, pledgees, assignees and successors-in-interest. The warrant was issued by us to Hercules on November 25, 2013, in connection with a secured term loan provided by Hercules to us. As of the date of this prospectus, 194,986 shares of common stock are exercisable by the selling stockholder.

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

We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale of shares of common stock by the selling stockholder.

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 and in the documents incorporated by reference in this prospectus 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 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.

USE OF PROCEEDS

All shares of our common stock offered by this prospectus are being registered for the account of the selling stockholder. We will not receive any of the proceeds from the sale of these shares.

However, we will receive proceeds from the cash exercise of the warrant which, if exercised in cash with respect to all of the 194,986 shares of common stock, would result in gross proceeds of up to \$699,999.74 to us. The warrant contains a net exercise provision, pursuant to which, in lieu of payment of the exercise price in cash, the warrant can be surrendered for the issuance of a number of shares of our common stock equal to the product of the number of shares of our common stock requested to be issued pursuant to the exercise multiplied by a fraction, the numerator of which is the then-current fair market value of our common stock minus the exercise price and the denominator of which is the then-current fair market value of our common stock. We intend to use the proceeds from any cash exercise for working capital and general corporate purposes. There is no assurance that the warrant will be exercised at all or exercised in cash.

DIVIDEND POLICY

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

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 15, 2014, there were 19,964,212 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), and on the provisions of our certificate of incorporation, as amended (our certificate of incorporation), and our bylaws, as amended (our bylaws). This information is qualified entirely by reference to the applicable provisions of the DGCL, 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 the board of directors of the Company (our board) out of funds legally available therefor. In the event of a dissolution, liquidation or winding-up of the Company, holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities and any preferential rights of any outstanding preferred stock.

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

Preferred Stock

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

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 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 the ability to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof may discourage takeover attempts that are not first approved by our board, including takeovers that may be considered by some stockholders to be in their best interests, such as those attempts that might result in a premium over the market price for the shares held by stockholders. Certain provisions could delay or impede the removal of incumbent directors even if such removal would be beneficial to our stockholders, such as the classification of our board and the lack of cumulative voting. Since our board 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 and in the policies they implement and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts.

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

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

Meetings of and Actions by Stockholders. Our bylaws provide that annual meetings of our stockholders may take place at the time and place designated by our board. A special meeting of our stockholders may be called at any time by our board, the chairman of our board or the president. Our bylaws provide that (i) our board 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 shall be determined by the board by board resolution from time to time and that our board 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 and newly created directorships resulting from any increase in the authorized number of directors on our board 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, 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 or the affirmative vote of at least $66 \frac{2}{3}$ 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 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.”

SELLING STOCKHOLDER

On November 25, 2013, we entered into a loan and security agreement with Hercules Technology Growth Capital, Inc. (Hercules), pursuant to which we may borrow a secured term loan of up to \$20.0 million from Hercules. We received the first advance of \$5.0 million under the secured term loan on November 25, 2013 and may request, subject to Hercules' consent in its sole discretion, an additional \$15.0 million in up to three advances with each advance in a minimum amount of \$5.0 million before June 30, 2014 unless extended upon Hercules' consent. We borrowed an additional \$5.0 million from Hercules on June 9, 2014 in connection with the acquisition of substantially all of the assets of EGWU, Inc. (formerly known as Egen, Inc.), an Alabama corporation (EGEN), and used the loan proceeds to pay the upfront cash payment to EGEN at the closing of the acquisition and certain transaction costs incurred in connection with the acquisition.

In connection with the loan and security agreement, we entered into a warrant agreement to purchase shares of our common stock with Hercules on November 25, 2013, pursuant to which Hercules has the right to exercise the warrant to purchase a total of up to 194,986 shares of our common stock at an exercise price of \$3.59 per share, subject to adjustments set forth in the warrant. 97,493 shares of common stock became immediately exercisable on November 25, 2013, and the remaining 97,493 shares of common stock became exercisable upon our receipt of the additional \$5.0 million of the secured term loan from Hercules on June 9, 2014. As of the date of this prospectus, 194,986 shares of common stock are exercisable by Hercules. The warrant will expire on November 25, 2018.

The warrant contains a net exercise provision, pursuant to which Hercules can, in lieu of payment of the exercise price in cash, surrender the warrant and receive a number of shares of our common stock equal to the product of the number of shares of our common stock requested to be issued pursuant to the exercise multiplied by a fraction, the numerator of which is the then-current fair market value of our common stock minus the exercise price and the denominator of which is the then-current fair market value of our common stock. The shares of common stock issuable upon exercise of the warrant are subject to proportionate adjustments for stock splits, stock combinations, stock dividends, recapitalizations or similar events with respect to our common stock.

The warrant was issued pursuant to an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended (the Securities Act). We entered into a registration agreement with Hercules on November 25, 2013, pursuant to which we have agreed to file a registration statement under the Securities Act, registering the resale by Hercules of the shares of common stock issuable upon exercise of the warrant. We have agreed to use commercially reasonable efforts to cause such registration statement to become effective and to keep it continuously effective until the earliest of (i) the shares of common stock issuable upon exercise of the warrant have been disposed of pursuant to such registration statement, (ii) such shares can be sold under Rule 144 without limitation or other restriction or (iii) the first year anniversary of the effective date of such registration statement.

We have prepared this prospectus to allow the selling stockholder, including its transferees, donees, pledgees, assignees or successors-in-interest, to sell, from time to time, the maximum of 194,986 shares of our common stock that may be issued upon exercise of the warrant by the selling stockholder. The following table indicates the name of the selling stockholder, the number of shares of common stock beneficially owned by the selling stockholder immediately prior to the date of this prospectus based on the information supplied to us by the selling stockholder and the total number of shares that may be offered pursuant to this prospectus. Because the selling stockholder may sell, transfer or otherwise dispose of all, some or none of the shares of our common stock covered by this prospectus, we cannot determine the number of such shares that will be sold, transferred or otherwise disposed of by the selling stockholder, or the amount or percentage of shares of our common stock that will be held by the selling stockholder upon termination of any particular offering. For purposes of the table below, we assume that the selling stockholder will sell the maximum number of shares of common stock covered by this prospectus.

In the table below, the percentage of shares beneficially owned is based on 19,964,212 shares of our common stock outstanding as of September 15, 2014 determined in accordance with Rule 13d-3 under the Exchange Act. Under such rule, beneficial ownership includes any shares over which the selling stockholder has sole or shared voting power or investment power and also any shares that the selling stockholder has the right to acquire within 60 days of such date through the exercise of any options or other rights. Except as otherwise indicated, based on the information supplied to us by the selling stockholder, the selling stockholder has sole voting and investment power with respect to all shares of the common stock shown as beneficially owned by it. The beneficial ownership information presented in this table is not necessarily indicative of beneficial ownership for any other purpose.

| Name of Selling Stockholder | Prior to the Offering | | Number of Shares of Common Stock Being Registered for Resale | After the Offering | |
|--|---|---|--|---|---|
| | Number of Shares of Common Stock Beneficially Owned | Percent of Shares of Common Stock Outstanding | | Number of Shares of Common Stock Beneficially Owned | Percent of Shares of Common Stock Outstanding |
| Hercules Technology Growth Capital, Inc. | 194,986 | * | 194,986 | — | — |

* Less than 1%.

PLAN OF DISTRIBUTION

The selling stockholder, including its transferees, donees, pledgees, assignees and other successors-in-interest, may sell, transfer or otherwise dispose of any or all of the shares of common stock offered by this prospectus from time to time on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market price or at negotiated prices. The selling stockholder may use any one or more of the following methods when selling shares:

Ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

Block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

Purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

An exchange distribution in accordance with the rules of the applicable exchange;

Privately negotiated transactions;

Broker-dealers may agree with the selling shareholder to sell a specified number of such shares at a stipulated price per share;

A combination of any such methods of sale;

Through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise; or

Any other method permitted pursuant to applicable law.

The selling stockholder may also sell shares under Rule 144 under the Securities Act of 1933, as amended (the Securities Act), if available, rather than under this prospectus.

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

The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus, as supplemented or amended to reflect such transaction.

The selling stockholder and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling stockholder has informed us that it does not have any agreement or understanding, directly or indirectly, with any person to distribute the common stock.

We are required to pay certain fees and expenses in connection with the registration of the shares of common stock issuable upon exercise of the warrant. We have agreed to indemnify the selling stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because the selling stockholder may be deemed to be an “underwriter” within the meaning of the Securities Act, it will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The selling stockholder has advised us that it has not entered into any agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale shares.

We have agreed to use commercially reasonable efforts to keep the registration statement continuously effective until the earliest of (i) the shares of common stock issuable upon exercise of the warrant have been disposed of pursuant to such registration statement, (ii) such shares can be sold under Rule 144 without limitation or other restriction or (iii) the first year anniversary of the effective date of such registration statement. The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended (the Exchange Act), any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of the distribution. In addition, the selling stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the selling stockholder and have informed the selling stockholder of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

We will not receive any proceeds from the sale of the shares by the selling stockholder.

LEGAL MATTERS

The validity of the shares of our common stock being offered by this prospectus will be passed upon for us by O'Melveny & Myers LLP, Menlo Park, 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, 2013, 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 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 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.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated costs and expenses payable by the registrant in connection with the offering of the securities being registered.

| | |
|-------------------------------------|-------------|
| SEC registration fee | \$78.86 |
| Accounting fees and expenses | \$1,000.00 |
| Legal fees and expenses | \$10,000.00 |
| Printing and miscellaneous expenses | \$500.00 |
| Total | \$11,578.86 |

Item 15. Indemnification of Directors and Officers.

The Company is incorporated under the laws of the State of Delaware. Our bylaws provide that we shall indemnify, to the maximum extent and in the manner permitted by the Delaware General Corporation Law, as amended (DGCL), our current and former directors and officers, and may indemnify our current and former employees and agents, against any and all expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding arising from their services in those capacities.

The DGCL provides that a Delaware corporation has the power generally to indemnify its current and former directors, officers, employees and other agents (each, a Corporate Agent) against expenses and liabilities, including amounts paid in settlement, in connection with any proceeding involving such person by reason of his being a Corporate Agent, other than a proceeding by or in the right of the corporation, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal proceeding, such person had no reasonable cause to believe his conduct was unlawful.

In the case of an action brought by or in the right of the corporation, indemnification of a Corporate Agent is permitted if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation. However, no indemnification is permitted in respect of any claim, issue or

matter as to which such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which such proceeding was brought shall determine upon application that despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitled to such indemnification.

To the extent that a Corporate Agent has been successful on the merits or otherwise in the defense of such proceeding, whether or not by or in the right of the corporation, or in the defense of any claim, issue or matter therein, the corporation is required to indemnify such person for expenses in connection therewith. Under the DGCL, the corporation may advance expenses incurred by a Corporate Agent in connection with a proceeding, provided that the Corporate Agent undertakes to repay such amount if it shall ultimately be determined that such person is not entitled to indemnification. Our certificate of incorporation requires us to advance expenses to any person entitled to indemnification, provided that such person undertakes to repay the advancement if it is determined in a final judicial decision from which there is no appeal that such person is not entitled to indemnification.

The power to indemnify and advance the expenses under the DGCL does not exclude other rights to which a Corporate Agent may be entitled to under our certificate of incorporation, by laws, agreement, vote of stockholders or disinterested directors or otherwise.

Our certificate of incorporation permits us to secure insurance on behalf of our directors, officers, employees and agents for any expense, liability or loss incurred in such capacities, whether or not the Company would have the power to indemnify such person against such liability under the provisions of the DGCL.

The purpose of these provisions is to assist us in retaining qualified individuals to serve as our directors, officers, employees and agents by limiting their exposure to personal liability for serving as such.

Item 16. Exhibits

| EXHIBIT NUMBER | DESCRIPTION |
|---------------------------|---|
| 3.1 | Certificate of Incorporation of Celsion Corporation (the Company), as amended, incorporated herein by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2004. |
| 3.2 | Certificate of Ownership and Merger of Celsion Corporation (a Maryland Corporation) into Celsion (Delaware) Corporation (inter alia, changing the Company’s name to “Celsion Corporation” from “Celsion (Delaware) Corporation”), incorporated herein by reference to Exhibit 3.1.3 to the Annual Report on Form 10-K of the Company for the year ended September 30, 2000. |
| 3.3 | Certificate of Amendment of the Certificate of Incorporation effective February 27, 2006, incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company filed with the SEC on March 1, 2006. |
| 3.4 | Certificate of Amendment to Certificate of Incorporation effective October 28, 2013, incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company filed with the SEC on October 29, 2013. |
| 3.5 | Amended and Restated Bylaws dated November 27, 2011, incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company filed with the SEC on December 1, 2011. |
| 4.1 | Form of Common Stock Certificate, par value \$0.01, incorporated herein by reference to Exhibit 4.1 to the Annual Report on Form 10-K of the Company for the year ended September 30, 2000. |
| 4.2 | Warrant Agreement to Purchase Shares of the Common Stock of Celsion Corporation dated as of November 25, 2013, by and between the Company and Hercules Technology Growth Capital, Inc., previously filed as Exhibit 4.2 to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014. |
| 4.3 | Registration Agreement dated as of November 25, 2013, by and between the Company and Hercules Technology Growth Capital, Inc., previously filed as Exhibit 4.3 to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014. |
| 5.1 | Opinion of O’Melveny & Myers LLP, previously filed as Exhibit 5.1 to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014. |
| 23.1(1) | Consent of Stegman & Company. |
| 23.2(1) | Consent of Anglin, Reichmann, Snellgrove & Armstrong P.C. |
| 23.3 | Consent of O’Melveny & Myers LLP (included in Exhibit 5.1). |

24.1 Power of Attorney, included on the signature page to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014.

(1) Filed herewith.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933; to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (ii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

II-2

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 and Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

If the registrant is relying on Rule 430B:

- (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (B)

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of the securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against

public policy as expressed in the Act and is, therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Lawrenceville, State of New Jersey, on September 16, 2014.

CELSION CORPORATION

By: /s/ Michael H. Tardugno
 Michael H. Tardugno
 President and Chief Executive Officer

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

| SIGNATURE | TITLE | DATE |
|--|---|--------------------|
| /s/ Michael H. Tardugno Michael H. Tardugno | President and Chief Executive Officer (Principal Executive Officer) and Director | September 16, 2014 |
| /s/ Jeffrey W. Church Jeffrey W. Church | Senior Vice President and Chief Financial Officer (Principal Financial Officer) | September 16, 2014 |
| /s/ Timothy J. Tumminello Timothy J. Tumminello | Controller and Chief Accounting Officer | September 16, 2014 |
| * Max E. Link, Ph.D. | Chairman of the Board, Director | September 16, 2014 |
| * Augustine Chow, Ph.D. | Director | September 16, 2014 |
| * Frederick J. Fritz | Director | September 16, 2014 |
| * Robert W. Hooper | Director | September 16, 2014 |

*
Alberto Martinez

Director

September 16, 2014

*By: /s/ Michael H. Tardugno
Michael H. Tardugno

Attorney-in-Fact

II-4

EXHIBIT INDEX

| EXHIBIT NUMBER | DESCRIPTION |
|---------------------------|---|
| 3.1 | Certificate of Incorporation of Celsion Corporation (the Company), as amended, incorporated herein by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2004. |
| 3.2 | Certificate of Ownership and Merger of Celsion Corporation (a Maryland Corporation) into Celsion (Delaware) Corporation (inter alia, changing the Company’s name to “Celsion Corporation” from “Celsion (Delaware) Corporation”), incorporated herein by reference to Exhibit 3.1.3 to the Annual Report on Form 10-K of the Company for the year ended September 30, 2000. |
| 3.3 | Certificate of Amendment of the Certificate of Incorporation effective February 27, 2006, incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company filed with the SEC on March 1, 2006. |
| 3.4 | Certificate of Amendment to Certificate of Incorporation effective October 28, 2013, incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company filed with the SEC on October 29, 2013. |
| 3.5 | Amended and Restated Bylaws dated November 27, 2011, incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company filed with the SEC on December 1, 2011. |
| 4.1 | Form of Common Stock Certificate, par value \$0.01, incorporated herein by reference to Exhibit 4.1 to the Annual Report on Form 10-K of the Company for the year ended September 30, 2000. |
| 4.2 | Warrant Agreement to Purchase Shares of the Common Stock of Celsion Corporation dated as of November 25, 2013, by and between the Company and Hercules Technology Growth Capital, Inc., previously filed as Exhibit 4.2 to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014. |
| 4.3 | Registration Agreement dated as of November 25, 2013, by and between the Company and Hercules Technology Growth Capital, Inc., previously filed as Exhibit 4.3 to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014. |
| 5.1 | Opinion of O’Melveny & Myers LLP, previously filed as Exhibit 5.1 to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014. |
| 23.1(1) | Consent of Stegman & Company. |
| 23.2(1) | Consent of Anglin, Reichmann, Snellgrove & Armstrong P.C. |
| 23.3 | Consent of O’Melveny & Myers LLP (included in Exhibit 5.1). |

24.1 Power of Attorney, included on the signature page to the registration statement on Form S-3 (File No. 333-193936) filed with the SEC on February 13, 2014.

(1) Filed herewith.