

**PROSPECTUS SUPPLEMENT NO. 2
(TO PROSPECTUS DATED AUGUST 9, 2010)**

**CELSION CORPORATION
Common Stock**

This Prospectus Supplement No. 2 supplements and amends the prospectus dated August 9, 2010, which we refer to as the Prospectus, which forms a part of our Registration Statement on Form S-1 (Registration Statement No. 333-168314). The Prospectus relates to the disposition from time to time of up to 2,444,434 shares of our common stock, which are held or may be held by the selling stockholder named in the Prospectus. We are not selling any common stock under the Prospectus and this Prospectus Supplement No. 2, and will not receive any of the proceeds from the sale of shares by the selling stockholder named in the Prospectus.

We are filing this Prospectus Supplement No. 2 to update, amend and supplement the information included or incorporated by reference in the Prospectus with the information contained in the current reports on Form 8-K filed with the Securities and Exchange Commission on December 8, 2010 and December 1, 2010, respectively (collectively, the "Current Reports"). Accordingly, we have attached the Current Reports to this prospectus supplement.

This Prospectus Supplement No. 2 should be read in conjunction with, and delivered with, the Prospectus and is qualified by reference to the Prospectus except to the extent that the information in this Prospectus Supplement No. 2 supersedes the information contained in the Prospectus. All references in the Prospectus to "this prospectus" are hereby amended to read "this prospectus (as supplemented and amended)".

This Prospectus Supplement No. 2 is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, including any amendments or supplements to it.

Our common stock is listed on The NASDAQ Capital Market under the symbol "CLSN." On December 27, 2010, the last reported sale price of our common stock on The NASDAQ Capital Market was \$2.07.

Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 6 of the accompanying prospectus, and under similar headings included in our recent quarterly and annual reports filed with the Securities and Exchange Commission.

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 to which this prospectus supplement relates are truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 28, 2010.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 6, 2010

Celsion Corporation

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or other jurisdiction
of incorporation)

001-15911
(Commission File Number)

52-1256615
(IRS Employer
Identification No.)

10220-L Old Columbia Road,
Columbia, Maryland
(Address of principal executive office)

21046-2364
(Zip Code)

Registrant's telephone number, including area code: (410) 290-5390

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communication pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.135-4(c))
-

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

Effective December 6, 2010, the Board of Directors of Celsion Corporation (the "Company") appointed Alberto R. Martinez MD, age 60, as a Class II Director. Dr. Martinez, whose career has spanned the product development landscape from clinical operations to successful commercial launch, brings an extensive track record in biopharmaceutical development and commercialization to the Board. Dr. Martinez previously served as the President and CEO of Talecris Biotherapeutics Inc., Executive Vice President of Worldwide Commercial Operations of CSL Behring, Senior Vice President at Aventis Behring, and as General Manager with Sandoz Pharmaceutical Corporation.

Dr. Martinez' Class II term will expire at the Company's Annual Meeting of Shareholders in 2012, at which time he will be eligible for nomination for another term. At the present time, Dr. Martinez has not been appointed to any committees of the Company's Board of Directors. Dr. Martinez will receive standard director fees and benefits, including an initial grant of stock options under the Company's 2007 Stock Incentive Plan to purchase 30,000 shares of the Company's common stock, vesting in three installments over three years, at an exercise price of \$2.81 per share, which is the grant date fair value of the Company's common stock on the NASDAQ Capital Market on December 3, 2010. The outside director compensation plan is described in more detail in the Company's Definitive Proxy Statement for its 2010 Annual Meeting of Shareholders filed with the Securities and Exchange Commission on April 30, 2010.

The Board of Directors has determined that Dr. Martinez is an independent director in accordance with the applicable rules of the Securities and Exchange Commission and The NASDAQ Capital Market.

On December 8, 2010, the Company issued a press release announcing the foregoing matters, a copy of which is attached hereto as Exhibit 99.1 to this Form 8-K.

Item 9.01 Financial Statement and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release of the Company, dated December 8, 2010

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CELSION CORPORATION

Date: December 8, 2010

By: /s/ Jeffrey W. Church
Jeffrey W. Church
Vice President and Chief Financial Officer

Exhibit Index

Exhibit Number	Description
99.1	Press Release of the Company, dated December 8, 2010

Celsion Announces New Board Member

Alberto R. Martinez, MD Brings Industry and Commercial Experience to the Company

COLUMBIA, Md., December 8, 2010 /PRNewswire via COMTEX News Network/ -- Celsion Corporation (Nasdaq: CLSN), a biotechnology drug development company that is leveraging its heat sensitive liposomal technology platform to encapsulate and deliver high concentrations of proven chemotherapeutics, announces the appointment of Alberto R. Martinez, MD, to its Board of Directors, effective December 6, 2010.

Dr. Martinez brings an extensive track record of accomplishments in biopharmaceutical development and commercialization. His career has spanned the product development landscape from clinical operations to successful commercial launch. Dr. Martinez previously served as the President and CEO of Talecris Biotherapeutics Inc., as well as Executive Vice President of Worldwide Commercial Operations of CSL Behring, Senior Vice President at Aventis Behring, and as General Manager with Sandoz Pharmaceutical Corporation.

Michael H. Tardugno, Celsion's President and CEO commented, "we are fortunate to have someone of Alberto's talent join our Board of Directors. His insights into emerging markets and executive experience in the biopharmaceutical industry will be enormous assets as Celsion plans both its future strategy and the immediate regulatory and commercial pathway for our lead drug, ThermoDox®, for the treatment of primary liver cancer."

"I am excited to be joining the Board at this juncture in Celsion's history, and I look forward to the opportunity to working with Celsion's Board and executive management team," noted Dr. Martinez. "It's my belief that the Company has an outstanding technology platform and clinical promise, from which a strong and growing oncology drug development company can be built."

About Celsion

Celsion is a leading oncology company dedicated to the development and commercialization of innovative cancer drugs including tumor-targeting treatments using focused heat energy in combination with heat-activated drug delivery systems. Celsion has research, license, or commercialization agreements with leading institutions such as the National Institutes of Health, Duke University Medical Center, University of Hong Kong, Mayo Clinic, the University of Pisa, and the North Shore Long Island Jewish Health System.

Investor Contact

Marcy Nanus
The Trout Group
646-378-2927 or mnanus@troutgroup.com

For more information on Celsion, visit our website: <http://www.celsion.com>

Celsion wishes to inform readers that forward-looking statements in this release are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Readers are cautioned that such forward-looking statements involve risks and uncertainties including, without limitation, unforeseen changes in the course of research and development activities and in clinical trials by others; possible acquisitions of other technologies, assets or businesses; possible actions by customers, suppliers, competitors, regulatory authorities; and other risks detailed from time to time in the Company's periodic reports filed with the Securities and Exchange Commission.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): December 1, 2010

CELSION CORPORATION
(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-15911
(Commission File Number)

52-1256615
(IRS Employer
Identification No.)

10220-L Old Columbia Road, Columbia, Maryland 21046-2364
(Address of Principal Executive Offices) (Zip Code)

(410) 290-5390
(Registrant's telephone number, including area code)

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
-

Item 8.01 Other Events.

On December 1, 2010, Celsion Corporation (the “Company”) made available to its investors an investor presentation (the “Investor Presentation”) on the “investor’s corner” page of the Company’s website at <http://www.celsion.com/events.cfm>.

A copy of the Investor Presentation is filed herewith as Exhibit 99.1 and is incorporated herein by reference.

Forward-Looking Statements

Statements and terms used in the Investor Presentation such as “expect,” “anticipate,” “estimate,” “plan,” “believe” and words of similar import regarding the Company’s expectations as to the development and effectiveness of its technologies, the potential demand for our products, and other aspects of our present and future business operations, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Although we believe that our expectations are based on reasonable assumptions within the bounds of our 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, readers should specifically consider the various factors contained in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2009 including, without limitation, unforeseen changes in the course of research and development activities and in clinical trials; possible changes in cost and timing of development and testing, capital structure, and other financial items; changes in approaches to medical treatment; introduction of new products by others; possible acquisitions of other technologies, assets or businesses; and possible actions by customers, suppliers, competitors and regulatory authorities. These and other risks and uncertainties could cause actual results to differ materially from those indicated by such forward-looking statements, including those set forth under the headings “Risk Factors” and “Forward-Looking Statements” in our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q.

The discussion of risks and uncertainties set forth in reports on Form 10-Q and Form 10-Q as well as in other filings with the Securities and Exchange Commission is not necessarily a complete or exhaustive list of all risks facing the Company at any particular point in time. We operate in a highly competitive, highly regulated and rapidly changing environment and our business is in a state of evolution. Therefore, it is likely that new risks will emerge, and that the nature and elements of existing risks will change, over time. It is not possible for management to predict all such risk factors or changes therein, or to assess either the impact of all such risk factors on our business or the extent to which any individual risk factor, combination of factors, or new or altered factors, may cause results to differ materially from those contained in any forward-looking statement. We disclaim any obligation to revise or update any forward-looking statement that may be made from time to time by us or on our behalf.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Investor Presentation of Celsion Corporation.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, each Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: December 1, 2010

CELSION CORPORATION

By: /s/ Jeffrey W. Church
Jeffrey W. Church
Vice President and Chief
Financial Officer

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
99.1	Investor Presentation of Celsion Corporation.

The Investor Presentation of Celsion Corporation is contained in the corresponding .PDF File.