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): May 4, 2010

Celsion Corporation

(Exact Name of Registrant as Specified in Charter)

Delaware	**001-15911**	**52-1256615**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

10220-L Old Columbia Road, Columbia, Maryland	**21046-2364**
(Address of principal executive office)	**(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 2.02 Results of Operations and Financial Condition.

On May 4, 2010, Celsion Corporation issued a press release reporting its financial results for the quarter ended March 31, 2010 (the "Earnings Release"). The Earnings Release is furnished as Exhibit 99.1 to this Current Report on Form 8-K. The information in this report shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section, and shall not be incorporated by reference into any registration statement pursuant to the Securities Act of 1933, as amended.

Item 9.01 Financial Statement and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Earnings Release, dated May 4, 2010, furnished pursuant to Item 2.02 of Form 8-K.

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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: May 4, 2010

By: /s/ Timothy J. Tumminello
Timothy J. Tumminello
Controller and Interim Chief Accounting Officer

Exhibit Index

Exhibit No.	Description
99.1	Earnings Release, dated May 4, 2010, furnished pursuant to Item 2.02 of Form 8-K.

Exhibit 99.1

Celsion Reports First Quarter 2010 Financial Results and Provides Business Update

Cash used in operating activities totaled $3.0 million for the first quarter 2010

COLUMBIA, MD (BUSINESS WIRE) May 4, 2010 – Celsion Corporation (NASDAQ: CLSN), a leading oncology drug development company, announced today financial results for the first quarter ended March 31, 2010 and addressed the progression of the clinical trials of ThermoDox®, Celsion's heat activated liposomal encapsulation of doxorubicin. ThermoDox® is currently being evaluated in the Phase III HEAT trial for the treatment of hepatocellular carcinoma (HCC) and in a Phase I/II trial for patients with recurrent chest wall breast cancer.

"We continue to make substantial progress recruiting patients into our Phase III HEAT trial for ThermoDox® and are on track to complete enrollment in the second half of this year with 331 patients enrolled to date," said Michael Tardugno, President and CEO of Celsion. "We have exceeded our goal of opening enrollment at 73 clinical trial sites world-wide. The Phase I/II DIGNITY trial of ThermoDox® in patients with recurrent chest wall breast cancer (RCW) also continues to advance. We are currently enrolling patients in the 50mg/m^2 dosing cohort, which will be used to determine our therapeutic dose.

Financial Results

For the first quarter ended March 31, 2010, Celsion reported a net loss from operations of $4.6 million, compared to a net loss from operations of $3.6 million for the same period of 2009. In the first quarter of 2010, the Company recorded a $1.6 million non-cash warrant liability charge. After effect of this non-cash charge, Celsion reported a net loss of $6.1 million, or $0.50 per diluted share, for the first quarter ended March 31, 2010 compared to a net loss of $3.6 million (after the effect of a $0.5 million noncash indemnity reserve benefit), or $0.35 per diluted share, in the same period of 2009. After the non-cash effect of the warrant liability charge of $1.6 million and other non-cash charges of $0.6 million related to stock based compensation and other expenses, and net balance sheet changes of $0.9 million, net cash used in operations totaled $3.0 million for the first quarter of 2010. The Company ended the quarter with a total of $10.4 million of cash, investments and other receivables and current assets.

Recent Company Highlights

- The Drug Safety Monitoring Board recommended continuation and dose escalation in the Phase I/II ThermoDox® study for RCW breast cancer
- The Data Monitoring Committee recommended continuation of the Phase III HEAT study
- Announced plans to launch a randomized Phase II Program to study ThermoDox® in combination with RFA for Colorectal Liver Metastases (CRLM) following completion of the enrollment of the current Phase III HEAT Trial. CRLM is the number one metastatic form of liver cancer in the US, representing approximately 50% of all liver metastases. Thermodox® has shown potential to effectively treat this disease.
- Hosted a Research and Development Day in New York City
- Presented long-term follow-up data from the Phase I ThermoDox® trial at a press conference at the University of Hong Kong
- Presented data supporting the use of ThermoDox® in the treatment of colorectal liver metastases at the 9th World Congress of the International Hepato-Pancreato-Biliary Association in Buenos Aires, Argentina
- Announced an Abstract was accepted for presentation at the American Society of Clinical Oncology 2010 Annual Meeting on the Phase I/II trial of ThermoDox® in Recurrent Chest Wall Cancer

The Company is holding a conference call to provide a business update and discuss the first quarter 2010 results at 11:00 a.m. Eastern Time on Tuesday, May 4, 2010. To participate in the call, interested parties may dial 1-888-600-4864 (Toll free U.S./Canada) or 1-913-312-1487 (International/Toll) and use Conference ID: 2068492 to register ten minutes before the call is scheduled to begin. The call will also be broadcast live on the Internet at **http://www.celsion.com.**

The call will be archived for replay on Tuesday, May 4, 2010 at 3:00 P.M. ET and will remain available until Tuesday, May 11, 2010. The replay can be accessed at 1-888-203-1112 (Toll free U.S./Canada) or 1-719-457-0820 (Toll/International) using Replay Pin: #2068492. The call will also be available on the Company's website, http://www.celsion.com, for 30 days after 3:00 P.M. on Tuesday, May 4, 2010.

About ThermoDox®

ThermoDox® in combination with hyperthermia has the potential to provide local tumor control and improve quality of life. ThermoDox® is a proprietary heat-activated liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers including

breast cancer. Localized mild hyperthermia (40-42 degrees Celsius) releases the entrapped doxorubicin from the liposome. This delivery technology enables high concentrations of doxorubicin to be deposited preferentially in a targeted tumor.

For primary liver cancer, ThermoDox® is being evaluated in a 600 patient global Phase III study at 60 clinical sites under an FDA Special Protocol Assessment. The study is designed to evaluate the efficacy of ThermoDox in combination with RFA when compared to patients who receive RFA alone as the control. The primary endpoint for the study is progression-free survival and enrollment is expected to be completed in the first half of 2010. For recurrent chest wall breast cancer, ThermoDox® is being evaluated in a pivotal Phase I/II open-label, dose-escalating trial that is designed to measure durable local complete response at the tumor site. Celsion expects to fully enroll the study in the third quarter of 2010. Additional information on these ThermoDox® clinical studies may be found at http://www.clinicaltrials.gov

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, Cleveland Clinic, and the North Shore Long Island Jewish Health System.

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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.

Celsion Corporation
Condensed Statements of Operations
(Unaudited)
(in thousands except for per share amounts)

	Three Months Ended March 31,	
	2010	**2009**
Operating expenses:		
Research and development	$ 3,275	$ 2,943
General and administrative	1,299	688
Total operating expenses	4,574	3,631
Loss from operations	(4,574)	(3,361)
Loss from valuation of warrant liability	(1,570)	-
Other (expense) income, net	(1)	14
Net Loss	$ (6,145)	$ (3,617)
Basic and diluted net loss per common share	$ (0.50)	$ (0.35)
Basic and diluted weighted average shares outstanding	12,186	10,190

Celsion Corporation
Balance Sheets
(in thousands except for per share amounts)

	March 31, 2010 (Unaudited)	December 31, 2009
ASSETS		
Current assets		
Cash and cash equivalents	$ 4,114	$ 6,924
Short term investments available for sale	5,458	5,695
Refundable income taxes	-	806
Prepaid expenses and other receivables	858	695
Total current assets	10,430	14,120
Property and equipment	497	537
Other assets		
Deposits	90	97
Other assets	49	51
Total other assets	139	148
Total assets	$ 11,066	$ 14,805
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable - trade	$ 2,304	$ 2,191
Other accrued liabilities	1,691	1,452
Note payable - current portion	112	108
Total current liabilities	4,107	3,751
Warrant liability	2,392	822
Other liabilities – noncurrent	161	197
Total liabilities	6,660	4,770
Stockholders' equity		
Common stock - $0.01 par value (75,000,000 shares authorized; 12,978,417 and 12,895,174 shares issued and 12,218,143 and 12,134,900 shares outstanding at March 31, 2010 and December 31, 2009, respectively)	130	129
Additional paid-in capital	95,539	95,035
Accumulated other comprehensive income	79	-
Accumulated deficit	(88,265)	(82,052)
Subtotal	7,483	13,112
Less: Treasury stock - at cost	(3,077)	(3,077)
Total stockholders' equity	4,406	10,035
Total liabilities and stockholders' equity	$ 11,066	$ 14,805