

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2017

OR

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

For the transition period from _____ to _____

Commission file number: 001-15911

CELSION CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

52-1256615

(I.R.S. Employer Identification Number)

997 Lenox Drive, Suite 100,

Lawrenceville, NJ 08648

(Address of principal executive offices)

(609) 896-9100

(Registrant's telephone number, including area code)

NA

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act (Check One):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

As of November 13, 2017, the Registrant had 16,062,341 shares of common stock, \$0.01 par value per share, outstanding.

CELSION CORPORATION
QUARTERLY REPORT ON
FORM 10-Q

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Forward-Looking Statements

This report includes “forward-looking statements” 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. All statements other than statements of historical fact are “forward-looking statements” for purposes of this Quarterly Report on Form 10-Q, including, without limitation, any projections of earnings, revenue or other financial items, any statements of the plans and objectives of management for future operations (including, but not limited to, pre-clinical development, clinical trials, manufacturing and commercialization), any statements concerning proposed drug candidates or other new products or services, any statements regarding future economic conditions or performance, any changes in the course of research and development activities and in clinical trials, any possible changes in cost and timing of development and testing, capital structure, financial condition, working capital needs and other financial items, any changes in approaches to medical treatment, any introduction of new products by others, any possible licenses or acquisitions of other technologies, assets or businesses, our ability to realize the full extent of the anticipated benefits of our acquisition of substantially all of the assets of EGEN, Inc., including achieving operational cost savings and synergies in light of any delays we may encounter in the integration process and additional unforeseen expenses, any possible actions by customers, suppliers, partners, competitors and regulatory authorities, compliance with listing standards of The NASDAQ Capital Market and any statements of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terminology such as “may,” “will,” “expects,” “plans,” “anticipates,” “estimates,” “potential” or “continue,” or the negative thereof or other comparable terminology. 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.

Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including, but not limited to, the risk factors set forth in Part II, Item 1A “Risk Factors” below and for the reasons described elsewhere in this Quarterly Report on Form 10-Q. All forward-looking statements and reasons why results may differ included in this report are made as of the date hereof and we do not intend to update any forward-looking statements, except as required by law or applicable regulations. The discussion of risks and uncertainties set forth in this Quarterly Report on Form 10-Q is not necessarily a complete or exhaustive list of all risks facing us at any particular point in time. We operate in a highly competitive, highly regulated and rapidly changing environment and our business is in a state of evolution. Therefore, it is likely that 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.

Except where the context otherwise requires, in this Quarterly Report on Form 10-Q, the “Company,” “Celsion,” “we,” “us,” and “our” refer to Celsion Corporation, a Delaware corporation, its wholly-owned subsidiaries CLSN Laboratories, Inc., also a Delaware corporation, and Celsion GmbH, a limited liability company in Zug Switzerland.

Trademarks

The Celsion brand and product names, including but not limited to Celsion® and ThermoDox® contained in this document are trademarks, registered trademarks or service marks of Celsion Corporation or its subsidiary in the United States (U.S.) and certain other countries. This document also contains references to trademarks and service marks of other companies that are the property of their respective owners.

PART I: FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

CELSION CORPORATION
 CONDENSED CONSOLIDATED
 BALANCE SHEETS

	September 30, 2017 (unaudited)	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 2,685,010	\$ 2,624,162
Investment securities – available for sale, at fair value	-	1,680,000
Accrued interest receivable on investment securities	-	4,008
Advances, deposits and other current assets	89,302	204,408
Subtotal current assets	2,774,312	4,512,578
Property and equipment (at cost, less accumulated depreciation and amortization of \$2,854,122 and \$2,513,022, respectively)	142,862	462,836
Other assets:		
In-process research and development	20,246,491	22,766,491
Other intangible assets, net	852,437	1,022,924
Goodwill	1,976,101	1,976,101
Security deposit on letter of credit	-	100,000
Patent licensing fees and other assets, net	8,761	8,761
Subtotal other assets	23,083,790	25,874,277
Total assets	<u>\$ 26,000,964</u>	<u>\$ 30,849,691</u>

See accompanying notes to the condensed consolidated financial statements.

CELSION CORPORATION
CONDENSED CONSOLIDATED
BALANCE SHEETS
(Continued)

	September 30, 2017 (unaudited)	December 31, 2016
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable — trade	\$ 2,806,201	\$ 2,878,978
Other accrued liabilities	2,690,973	2,483,756
Notes payable - current portion	-	2,560,553
Deferred revenue – current portion	500,000	500,000
Subtotal current liabilities	5,997,174	8,423,287
Earn-out milestone liability	12,518,054	13,188,226
Deferred revenue – non-current portion	2,125,000	2,500,000
Other liabilities – non-current portion	73,680	12,352
Total liabilities	20,713,908	24,123,865
Commitments and contingencies	-	-
Stockholders' equity:		
Preferred Stock - \$0.01 par value (100,000 shares authorized and no shares issued or outstanding at September 30, 2017 and December 31, 2016, respectively)	-	-
Common stock - \$0.01 par value (112,500,000 shares authorized; 8,355,013 and 2,230,452 shares issued at September 30, 2017 and December 31, 2016, respectively, and 8,354,679 and 2,230,118 shares outstanding at September 30, 2017 and December 31, 2016, respectively)	83,555	22,305
Additional paid-in capital	262,389,735	248,168,421
Accumulated deficit	(257,101,046)	(241,379,712)
Subtotal	5,372,244	6,811,014
Treasury stock, at cost (334 shares at September 30, 2017 and December 31, 2016)	(85,188)	(85,188)
Total stockholders' equity	5,287,056	6,725,826
Total liabilities and stockholders' equity	\$ 26,000,964	\$ 30,849,691

See accompanying notes to the condensed consolidated financial statements.

CELSION CORPORATION
CONDENSED CONSOLIDATED
STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Licensing revenue	\$ 125,000	\$ 125,000	\$ 375,000	\$ 375,000
Operating expenses:				
Research and development	3,348,847	4,225,132	9,870,754	11,002,675
General and administrative	1,174,250	1,496,471	4,291,482	4,888,301
Total operating expenses	<u>4,523,097</u>	<u>5,721,603</u>	<u>14,162,236</u>	<u>15,890,976</u>
Loss from operations	(4,398,097)	(5,596,603)	(13,787,236)	(15,515,976)
Other income (expense):				
Gain (loss) from change in valuation of earn-out milestone liability	1,246,151	(662,410)	670,172	(556,382)
Loss from impairment of in-process research and development	(2,520,000)	-	(2,520,000)	-
Investment income, net	524	8,133	3,941	21,832
Interest expense	-	(161,025)	(91,756)	(608,576)
Other income	93	2,218	3,545	1,965
Total other expense, net	<u>(1,273,232)</u>	<u>(813,084)</u>	<u>(1,934,098)</u>	<u>(1,141,161)</u>
Net loss	(5,671,329)	(6,409,687)	(15,721,334)	(16,657,137)
Deemed dividend related to warrant modification	-	-	(345,685)	-
Net loss attributable to common shareholders	<u>\$ (5,671,329)</u>	<u>\$ (6,409,687)</u>	<u>\$ (16,067,019)</u>	<u>\$ (16,657,137)</u>
Net loss per common share				
Basic and diluted	<u>\$ (0.70)</u>	<u>\$ (3.22)</u>	<u>\$ (3.04)</u>	<u>\$ (9.27)</u>
Weighted average shares outstanding				
Basic and diluted	<u>8,054,658</u>	<u>1,993,233</u>	<u>5,171,699</u>	<u>1,796,184</u>

See accompanying notes to the condensed consolidated financial statements.

CELSION CORPORATION
CONDENSED CONSOLIDATED
STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net loss	\$ (5,671,329)	\$ (6,409,687)	\$ (15,721,334)	\$ (16,657,137)
Other comprehensive (loss) gain				
Changes in:				
Realized loss on investment securities recognized in investment income, net	—	—	—	3,858
Unrealized gain on investment securities	—	464	—	464
Other comprehensive gain	—	464	—	4,322
Comprehensive loss	<u>\$ (5,671,329)</u>	<u>\$ (6,409,223)</u>	<u>\$ (15,721,334)</u>	<u>\$ (16,652,815)</u>

See accompanying notes to the condensed consolidated financial statements.

CELSION CORPORATION
CONDENSED CONSOLIDATED
STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2017	2016
Cash flows from operating activities:		
Net loss	\$ (15,721,334)	\$ (16,657,137)
Non-cash items included in net loss:		
Depreciation and amortization	511,587	365,625
Change in fair value of earn-out milestone liability	(670,172)	556,382
Impairment of in-process research and development	2,520,000	-
Deferred revenue	(375,000)	(375,000)
Stock-based compensation costs	951,488	1,331,094
Shares issued out of treasury	-	79,238
Amortization of deferred finance charges and debt discount associated with notes payable	35,370	198,806
Change in deferred rent liability	61,328	(25,981)
Loss realized on sale of investment securities	-	3,858
Net changes in:		
Accrued interest on short term investments	4,008	22,205
Advances, deposits and other current assets	115,106	(136,871)
Accounts payable	(72,777)	195,716
Accrued liabilities	207,217	725,660
Net cash (used in) operating activities:	<u>(12,433,179)</u>	<u>(13,716,405)</u>
Cash flows from investing activities:		
Proceeds from sale and maturity of investment securities	1,680,000	10,800,000
Purchases of investment securities	-	(4,515,125)
Refund of security for letter of credit	100,000	-
Purchases of property and equipment	(21,126)	(48,928)
Net cash provided by investing activities	<u>1,758,874</u>	<u>6,235,947</u>
Cash flows from financing activities:		
Proceeds from sale of common stock equity, net of issuance costs	8,405,190	5,428,965
Proceeds from exercise of common stock warrants, net of issuance costs	4,925,886	-
Principal payment and end of term charges on note payable	(2,595,923)	(3,029,429)
Net cash provided by financing activities	<u>10,735,153</u>	<u>2,399,536</u>
Increase (decrease) in cash and cash equivalents	60,848	(5,080,922)
Cash and cash equivalents at beginning of period	2,624,162	9,265,144
Cash and cash equivalents at end of period	<u>\$ 2,685,010</u>	<u>\$ 4,184,222</u>
Supplemental disclosures of cash flow information:		
Interest paid	<u>\$ 56,386</u>	<u>\$ 409,996</u>

See accompanying notes to the condensed consolidated financial statements.

CELSION CORPORATION

**NOTES TO THE CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS
(UNAUDITED)**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2017 AND 2016

Note 1. Business Description

Celsion Corporation, a Delaware corporation based in Lawrenceville, New Jersey, its wholly-owned subsidiaries CLSN Laboratories, Inc., also a Delaware corporation, and Celsion GmbH, a limited liability company in Zug Switzerland, referred to herein as “Celsion”, “we”, or “the Company”, as the context requires, is a fully-integrated development stage oncology drug company focused on developing a portfolio of innovative cancer treatments, including directed chemotherapies, DNA-mediated immunotherapy and RNA-based therapies. We are working to develop and commercialize more efficient, effective and targeted oncology therapies based on our technologies, with the goal of developing novel therapeutics that maximize efficacy while minimizing side effects common to many cancer treatments. Our lead product candidate is ThermoDox®, a proprietary dosage form of doxorubicin based on a heat-activated liposomal platform technology, currently in a Phase III clinical trial for the treatment of non-resectable hepatocellular carcinoma (“HCC”) also known as primary liver cancer. Our pipeline includes GEN-1, a DNA-based immunotherapy currently in a Phase I clinical trial for the localized treatment of ovarian cancer and pre-clinical development for brain cancer. GEN-1 is based on a platform technology for the development of treatments using novel nucleic acid-based immunotherapies and other anti-cancer DNA or RNA therapies.

Note 2. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements, which include the accounts of Celsion Corporation, CLSN Laboratories, Inc. and Celsion GmbH, have been prepared in accordance with generally accepted accounting principles in the United States (GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. All intercompany balances and transactions have been eliminated. Certain information and disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations.

In the opinion of management, all adjustments, consisting only of normal recurring accruals considered necessary for a fair presentation, have been included in the accompanying unaudited condensed consolidated financial statements. Operating results for the three and nine month periods ended September 30, 2017 are not necessarily indicative of the results that may be expected for any other interim period(s) or for any full year. For further information, refer to the financial statements and notes thereto included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed with the Securities and Exchange Commission (SEC) on March 24, 2017.

The preparation of financial statements in conformity with GAAP requires management to make judgments, estimates, and assumptions that affect the amount reported in the Company’s financial statements and accompanying notes. Actual results could differ materially from those estimates. Events and conditions arising subsequent to the most recent balance sheet date have been evaluated for their possible impact on the financial statements and accompanying notes. No events and conditions would give rise to any information that required accounting recognition or disclosure in the financial statements other than those arising in the ordinary course of business.

As more fully described in Note 10, the Company effected a 14-for-1 reverse stock split of its common stock on May 26, 2017 which was made effective for trading purposes as of the commencement of trading on May 30, 2017. All prior period shares of common stock have been adjusted to reflect the 14-for-1 reverse stock split.

Note 3. Financial Condition and Business Plan

Since inception, the Company has incurred substantial operating losses, principally from expenses associated with the Company’s research and development programs, clinical trials conducted in connection with the Company’s product candidates, and applications and submissions to the Food and Drug Administration (FDA) among other international regulatory authorities. We have incurred approximately \$257 million of cumulated net losses. As of September 30, 2017, we had approximately \$2.7 million in cash and cash equivalents. As discussed in Note 16, on October 4, 2017, we entered into exercise agreements with certain warrant holders whereby these warrant holders would exercise 4.7 million warrants at their respective strike prices of \$2.07 and \$4.75 per share and the Company issued to these warrant holders 1.2 million new warrants at an exercise price of \$6.20 per warrant share. The exercise of these warrants, coupled with the exercise of 0.3 million additional warrants provided the Company with \$17.0 million in gross proceeds. Also as discussed in Note 16, on October 27, 2017, we entered into an underwriting agreement whereby the Company sold approximately 2.6 million shares of common stock and warrants to purchase approximately 1.3 million shares of common stock for gross proceeds of \$6.6 million.

We have substantial future capital requirements associated with our continued research and development activities and to advance our product candidates through various stages of development. The Company believes these expenditures are essential for the commercialization of its technologies.

The actual amount of funds the Company will need to operate is subject to many factors, some of which are beyond the Company's control. These factors include the following:

- the progress of research activities;
- the number and scope of research programs;
- the progress of preclinical and clinical development activities;
- the progress of the development efforts of parties with whom the Company has entered into research and development agreements;
- the costs associated with additional clinical trials of product candidates;
- the ability to maintain current research and development licensing arrangements and to establish new research and development and licensing arrangements;
- the ability to achieve milestones under licensing arrangements;
- the costs involved in prosecuting and enforcing patent claims and other intellectual property rights; and
- the costs and timing of regulatory approvals.

The Company has based its estimate on assumptions that may prove to be wrong. The Company may need to obtain additional funds sooner or in greater amounts than it currently anticipates. Potential sources of financing include strategic relationships, public or private sales of the Company's shares or debt and other sources. If the Company raises funds by selling additional shares of common stock or other securities convertible into common stock, the ownership interest of existing stockholders may be diluted.

With the \$2.7 million in cash and investments on hand at September 30, 2017 combined with the gross proceeds of \$23.6 million provided by the exercise of warrants and the equity offering in October 2017 (Note 16), the Company believes it has sufficient capital resources to fund its operations well into the second quarter of 2019. The Company will be required to obtain additional funding in order to continue the development of its current product candidates within the anticipated time periods, if at all, and to continue to fund operations. As more fully discussed in Note 10, the Company has \$7.5 million available under a controlled equity offering facility it has with Cantor Fitzgerald & Co. Besides this equity facility, the Company does not have any committed sources of financing at this time, and there is uncertainty whether additional funding will be available when needed on terms that will be acceptable to it, or at all. If the Company would not be able to obtain financing when needed, it could be unable to carry out the business plan and may have to significantly limit its operations, and its business, financial condition and results of operations could be materially harmed. With the current cash on hand and the gross proceeds of \$23.6 million from warrant exercises and the equity offering in October, 2017, management believes the Company will be able to meet its obligations as they come due.

Note 4. New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by Financial Accounting Standards Board (FASB) and are adopted by us as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued accounting pronouncements will not have a material impact on the Company's consolidated financial position, results of operations, and cash flows, or do not apply to our operations.

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09 “Revenue from Contracts with Customers (Topic 606),” which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. ASU 2014-09 was originally going to be effective on January 1, 2017; however, the FASB issued ASU 2015-14, “Revenue from Contracts with Customers (Topic 606) — Deferral of the Effective Date,” which deferred the effective date of ASU 2014-09 by one year to January 1, 2018. In March 2016, the FASB issued ASU No. 2016-8, “Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations. The amendments in this ASU do not change the core principle of ASU No. 2014-09 but the amendments clarify the implementation guidance on reporting revenue gross versus net. The effective date for the amendments in this ASU is the same as the effective date of ASU No. 2014-09. In April 2016, the FASB issued ASU No. 2016-10, “Revenue from Contracts with Customers (Identifying Performance Obligations and Licensing),” to clarify the implementation guidance on identifying performance obligations and licensing. The standard allows for either “full retrospective” adoption, meaning the standard is applied to all of the periods presented, or “modified retrospective” adoption, meaning the standard is applied only to the most current period presented in the financial statements. The Company plans to adopt the standard on January 1, 2018 using the modified retrospective approach. The Company will conduct its contract review process throughout the remainder of 2017 and make appropriate changes to business and control processes to support recognition and disclosure under the new standard. Based on the Company’s evaluation to date, the adoption of the ASU 2014-09 is not expected to have a material impact on its consolidated financial statements because existing contractual performance obligations, which determine when and how revenue is recognized, are not materially changed under the new standard. Additionally, the Company is also working on the expanded disclosures related to revenue recognition as required by the new standard.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which requires that most equity investments be measured at fair value, with subsequent changes in fair value recognized in net income (other than those accounted for under the equity method of accounting). This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Based on the Company’s evaluation to date, the adoption of the ASU 2016-01 is not expected to have a material impact on its consolidated financial statements or its disclosures.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, Leases (Topic 842), which requires that lessees recognize assets and liabilities for leases with lease terms greater than twelve months in the statement of financial position. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. This update also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. The update is effective for fiscal years beginning after December 15, 2018, including interim reporting periods within that reporting period. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this guidance will have on its consolidated financial statements and disclosures.

In March 2016, the FASB issued Accounting Standards Update No. 2016-09, Compensation – Stock Compensation (Topic 718). The new standard simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The new standard is effective for public companies for annual reporting periods beginning after December 15, 2016, including interim periods within those annual reporting periods; however, early adoption is allowed. The Company adopted this standard in January 2017 and made the election to account for award forfeitures as they occur. The adoption of this standard did not have a material impact on the Company’s consolidated financial statements.

In August 2016, the FASB issued Accounting Standard Update No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. This update clarifies how certain cash receipts and payments should be presented in the statement of cash flows and is effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted. Based on the Company’s evaluation to date, the adoption of the ASU 2016-01 is not expected to have a material impact on its consolidated financial statements or its disclosures.

In November 2016, the FASB issued Accounting Standard Update No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash. This update amends the guidance in ASC 230, including providing additional guidance related to transfers between cash and restricted cash and how entities present, in their statement of cash flows, the cash receipts and cash payments that directly affect the restricted cash accounts. This guidance is effective for annual reporting periods beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Based on the Company’s evaluation to date, the adoption of the ASU 2016-01 is not expected to have a material impact on its consolidated financial statements or its disclosures.

In January 2017, the FASB issued Accounting Standard Update No. 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business, which clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This guidance is effective for annual reporting periods beginning after December 15, 2018, and interim periods within those years, with early adoption permitted. The Company is currently evaluating the impact of adoption on its consolidated financial statements.

In January 2017, the FASB issued Accounting Standard Update No. 2017-04, Intangibles-Goodwill and Other, Simplifying the Test for Goodwill Impairment, which eliminates Step 2 from the goodwill impairment test. Under the revised test, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. This ASU is effective for any interim or annual impairment tests for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company adopted this method for its impairment test of goodwill during 2017.

Note 5. Net Loss per Common Share

Basic loss per share is calculated based upon the net loss available to common shareholders divided by the weighted average number of common shares outstanding during the period. Diluted loss per share is calculated after adjusting the denominator of the basic earnings per share computation for the effects of all dilutive potential common shares outstanding during the period. The dilutive effects of preferred stock, options and warrants and their equivalents are computed using the treasury stock method.

The total number of shares of common stock issuable upon exercise of warrants and equity awards was 6,208,386 shares for the three and nine month periods ended September 30, 2017. For the three and nine month periods ended September 30, 2017, diluted loss per common share was the same as basic loss per common share as all options and all warrants that were exercisable into shares of the Company's common stock were excluded from the calculation of diluted earnings attributable to common shareholders per common share as their effect would have been anti-dilutive.

For the three and nine month periods ended September 30, 2016, the total number of shares of common stock issuable upon exercise of warrants and equity awards was 1,353,312 shares. The Pre-funded Series B Warrants (as more fully described in Note 10 of these financial statements) exercisable into shares of the Company's common stock totaling 132,142 shares was considered issued in calculating basic loss per share. For the three and nine month periods ended September 30, 2016, diluted loss per common share was the same as basic loss per common share as the other 1,221,168 warrants and equity awards that were exercisable into shares of the Company's common stock were excluded from the calculation of diluted loss per common share as their effect would have been anti-dilutive.

Note 6. Fair Value of Measurements

FASB Accounting Standards Codification (ASC) Section 820 "*Fair Value Measurements and Disclosures*," establishes a three level hierarchy for fair value measurements which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The three levels of inputs that may be used to measure fair value are as follows:

Level 1: Quoted prices (unadjusted) or identical assets or liabilities in active markets that the entity has the ability to access as of the measurement date;

Level 2: Significant other observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and

Level 3: Significant unobservable inputs that reflect a reporting entity's own assumptions that market participants would use in pricing an asset or liability.

The fair values of securities available for sale are determined by obtaining quoted prices on nationally recognized exchanges (Level 1 inputs) or matrix pricing, which is a mathematical technique widely used in the industry to value debt securities without relying exclusively on quoted prices for the specific securities but rather by relying on the securities' relationship to other benchmark quoted securities (Level 2 inputs).

Cash and cash equivalents, other current assets, accounts payable and other accrued liabilities are reflected in the balance sheet at their estimated fair values primarily due to their short-term nature. There were no transfers of assets or liabilities between Level 1 and Level 2 and no transfers in or out of Level 3 during the nine months ended September 30, 2017 except for the change in the earn-out milestone liability included in earnings (Note 12).

Assets and liabilities measured at fair value are summarized below:

	Total Fair Value on the Balance Sheet	Quoted Prices In Active Markets For Identical Assets/Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Recurring items as of December 31, 2016 Investment securities, available for sale	\$ 1,680,000	\$ 1,680,000	\$ —	\$ —
Liabilities:				
Recurring items as of September 30, 2017 Earn-out milestone liability (Note 12)	\$ 12,518,054	\$ —	\$ —	\$ 12,518,054
Recurring items as of December 31, 2016 Earn-out milestone liability (Note 12)	\$ 13,188,226	\$ —	\$ —	\$ 13,188,226

Note 7. 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 “Asset Purchase Agreement”). We 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 Asset Purchase Agreement. At the closing, we paid approximately \$3.0 million in cash after the expense adjustment and issued 193,728 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, pursuant to Section 4(2) thereof. In addition, 47,862 shares of common stock were held back by us at the closing and are issuable to EGEN pending satisfactory resolution of any post-closing adjustments for expenses or in relation to EGEN’s indemnification obligations under the Asset Purchase Agreement. These shares were issued on June 16, 2017.

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 upon achievement of three major milestone events as follows:

- \$12.4 million will become payable upon achieving certain specified development milestones relating to an ovarian cancer study of GEN-1 (formerly known as EGEN-001) to be conducted by us or our subsidiary;
- \$12.0 million will become payable upon achieving certain specified development milestones relating to a GEN-1 glioblastoma multiforme brain cancer study to be conducted by us or our subsidiary; and
- up to \$6.0 million will become payable upon achieving certain specified milestones relating to the TheraSilence technology acquired from EGEN in the acquisition.

The following table summarizes the fair values of these assets acquired and liabilities assumed related to the acquisition.

Property and equipment, net	\$ 35,000
In-process research and development	24,211,000
Other intangible assets (Covenant not to compete)	1,591,000
Goodwill	1,976,000
Total assets	27,813,000
Accounts payable and accrued liabilities	(235,000)
Net assets acquired	\$ 27,578,000

Acquired In-Process Research and Development (IPR&D) consists of EGEN's drug technology platforms known as "TheraPlas" and "TheraSilence". The fair value of the IPR&D drug technology platforms was estimated to be \$24.2 million as of the acquisition date using the Multi-Period Excess Earnings Method (MPEEM). Under the MPEEM, the fair value of an intangible asset is equal to the present value of the asset's incremental after-tax cash flows (excess earnings) remaining after deducting the market rates of the return of the estimated value of contributory assets (contributory charge) over its remaining useful life. As of the closing of the acquisition, the IPR&D is considered indefinite lived intangible assets and will not be amortized.

IPR&D is reviewed for impairment at least annually as of our third quarter ended September 30, and whenever events or changes in circumstances indicate that the carrying value of the assets might not be recoverable. At December 31, 2016, the Company determined one of the IPR&D assets related to the development of its RNA delivery system being developed with collaborators using their RNA product candidates, valued at \$1.4 million, was impaired. Therefore, the Company wrote off the value of this IPR&D asset incurring a non-cash charge of \$1.4 million in the fourth quarter of 2016.

At September 30, 2017, after the Company's assessment of the totality of the events that could impair IPR&D, the Company determined certain IPR&D assets related to the development of its glioblastoma multiforme cancer (GBM) product candidate may be impaired. To arrive at this determination, the Company assessed the status of studies in GBM conducted by its competitors and the Company's strategic commitment of resources to its studies in primary liver cancer and ovarian cancer. The Company estimated the fair value of the IPR&D related to GBM at September 30, 2017 using the MPEEM. The Company concluded that the GBM asset, valued at \$9.4 million, was partially impaired and wrote down the GBM asset to \$6.9 million incurring a non-cash charge of \$2.5 million in the third quarter of 2017. In connection with the writeoff of this IPR&D asset, the Company concluded there was a reduced probability of payments of the earn-out milestones associated with the GBM asset and therefore reduced the earn-out milestone liability from \$13.8 million to \$12.5 million, recording a non-cash benefit of approximately \$1,246,151 in the third quarter of 2017. The Company concluded none of the other IPR&D assets were impaired at September 30, 2017.

Pursuant to the EGEN Purchase Agreement, EGEN provided certain covenants ("Covenant Not To Compete") to the Company whereby EGEN agreed, during the period ending on the seventh anniversary of the closing date of the acquisition on June 20, 2014, not to enter into any business, directly or indirectly, which competes with the business of the Company nor will it contact, solicit or approach any of the employees of the Company for purposes of offering employment.

Amortization expense was \$56,829 and \$170,487 during the three months and nine months ended September 30, 2017, respectively. The carrying value of the Covenant Not To Compete was \$852,437, net of \$738,777 accumulated amortization, as of September 30, 2017 and was \$1,022,924, net of \$568,290 accumulated amortization, as of December 31, 2016.

The purchase price exceeded the estimated fair value of the net assets acquired by approximately \$2.0 million which was recorded as Goodwill. Goodwill represents the difference between the total purchase price for the net assets purchased from EGEN and the aggregate fair values of tangible and intangible assets acquired, less liabilities assumed. Goodwill is reviewed for impairment at least annually as of our third quarter ended September 30 or sooner if we believe indicators of impairment exist.

As of September 30, 2017, we concluded that the Company's fair value exceeded its carrying value therefore "it is not more likely than not" that the Goodwill was impaired.

Note 8. Accrued Liabilities

Other accrued liabilities at September 30, 2017 and December 31, 2016 include the following:

	September 30, 2017	December 31, 2016
Amounts due to contract research organizations and other contractual agreements	\$ 907,850	\$ 1,115,193
Accrued payroll and related benefits	1,514,253	1,066,751
Accrued professional fees	248,850	259,551
Accrued interest on notes payable	-	22,241
Other	20,020	20,020
Total	<u>\$ 2,690,973</u>	<u>\$ 2,483,756</u>

Note 9. Note Payable

In November 2013, the Company entered into a loan agreement with Hercules Technology Growth Capital, Inc. (Hercules) which permits up to \$20 million in capital to be distributed in multiple tranches (the Hercules Credit Agreement). The Company drew the first tranche of \$5 million upon closing of the Hercules Credit Agreement in November 2013 and used approximately \$4 million of the proceeds to repay the outstanding obligations under its loan agreement with Oxford Finance LLC and Horizon Technology Finance Corporation as discussed further below. On June 10, 2014, the Company closed the second \$5 million tranche under the Hercules Credit Agreement. The proceeds were used to fund the \$3.0 million upfront cash payment associated with Celsion's acquisition of EGEN, as well as the Company's transaction costs associated with the EGEN acquisition. Upon the closing of this second tranche, the Company has drawn down a total of \$10 million under the Hercules Credit Agreement.

The obligations under the Hercules Credit Agreement were in the form of secured indebtedness bearing interest at a calculated prime-based variable rate (11.25% per annum since inception through December 17, 2015 and 11.50% since). Payments under the loan agreement were interest only for the first twelve months after loan closing, followed by a 30-month amortization period of principal and interest through the scheduled maturity date of June 1, 2017. In connection with the Hercules Credit Agreement, the Company incurred cash expenses of \$122,378. Also in connection with the Hercules Credit Facility, the Company paid loan origination fees of \$230,000. Collectively, these deferred fees have been classified as a direct deduction from the debt liability consistent with the presentation of a debt discount and are being amortized as interest expense using the effective interest method over the life of the loan.

As a fee in connection with the Hercules Credit Agreement, the Company issued Hercules a warrant for a total of 6,963 shares of the Company's common stock (the Hercules Warrant) at a per share exercise price of \$50.26, exercisable for cash or by net exercise from November 25, 2013. Upon the closing of the second tranche on June 10, 2014, this warrant became exercisable for an additional 6,963 shares of the Company's common stock. The Hercules Warrant will expire November 25, 2018. Hercules has certain rights to register the common stock underlying the Hercules Warrant pursuant to a Registration Rights Agreement with the Company dated November 25, 2013. The registration rights expire on the date when such stock may be sold under Rule 144 without restriction or upon the first year anniversary of the registration statement for such stock, whichever is earlier. The common stock issuable pursuant to the Hercules Warrant was filed pursuant to Rule 415 under the Securities Act of 1933 on the Prospectus for Registration Statement No. 333-193936 and was declared effective on September 30, 2014. The Company valued the Hercules Warrants issued using the Black-Scholes option pricing model and recorded a total of \$476,261 as a direct deduction from the debt liability consistent with the presentation of a debt discount and are being amortized as interest expense using the effective interest method over the life of the loan. Also in connection with each of the \$5.0 million tranches, the Company is required to pay an end of term charge equal to 3.5% of each original loan amount at time of maturity. Therefore, these amounts totaling \$350,000 were amortized as interest expense using the effective interest method over the life of the loan.

The loan balance and end of term charges on the Hercules Credit Agreement was paid in full in June 2017.

For the three month periods ended September 30, 2017 and 2016, the Company incurred \$0 and \$107,805 in interest expense, respectively, and amortized \$0 and \$53,220, respectively as interest expense for deferred fees, debt discount and end of term charges in connection with the Hercules Credit Agreement. For the nine month periods ended September 30, 2017 and 2016, the Company incurred \$56,386 and \$409,770 in interest expense, respectively, and amortized \$35,370 and \$198,806, respectively as interest expense for deferred fees, debt discount and end of term charges in connection with the Hercules Credit Agreement.

Note 10. Stockholders' Equity

In September 2015, the Company filed with the Securities and Exchange Commission (the SEC) a \$75 million shelf registration statement on Form S-3 (the 2015 Shelf Registration Statement) (File No. 333-206789) that allows the Company to issue any combination of common stock, preferred stock or warrants to purchase common stock or preferred stock. This shelf registration was declared effective on September 25, 2015.

At the 2016 Annual Meeting of Stockholders of the Company in June 2016, the Company's stockholders of the Company approved an increase in the number of the authorized shares of the Company's common stock from 75,000,000 shares to 112,500,000 shares. The number of the authorized shares of preferred stock remained at 100,000 shares. The aggregate number of shares of all classes of stock that the Company may issue, after giving effect to such amendment as approved by the stockholders, is 112,600,000 shares.

Reverse Stock Split

On May 26, 2017, the Company effected a 14-for-1 reverse stock split of its common stock which was made effective for trading purposes as of the commencement of trading on May 30, 2017. As of that date, each 14 shares of issued and outstanding common stock and equivalents was consolidated into one share of common stock. In addition, at the market open on May 30, 2017, the Company's common stock started trading under a new CUSIP number 15117N503 although the Company's ticker symbol, CLSN, remained unchanged.

The reverse stock split was previously approved by the Company's stockholders at the 2017 Annual Meeting held on May 16, 2017, and the Company subsequently filed a Certificate of Amendment to its Certificate of Incorporation to effect the stock consolidation. The primary reasons for the reverse stock split and the amendment are:

- To increase the market price of the Company's common stock making it more attractive to a broader range of institutional and other investors, and
- To provide the Company with additional capital resources and flexibility sufficient to execute its business plans including the establishment of strategic relationships with other companies and to ensure its ability to raise additional capital as necessary.

Immediately prior to the reverse stock split, the Company had 56,982,418 shares of common stock outstanding which consolidated into 4,070,172 shares of the Company's common stock. No fractional shares were issued in connection with the reverse stock split. Holders of fractional shares have been paid out in cash for the fractional portion with the Company's overall exposure for such payouts consisting of a nominal amount. The number of outstanding options and warrants were adjusted accordingly, with outstanding options being reduced from approximately 2.4 million to approximately 0.2 million and outstanding warrants being reduced from approximately 33.5 million to approximately 2.4 million.

July 6, 2017 Common Stock Offering

On July 6, 2017, the Company entered into a securities purchase agreement with several investors, pursuant to which the Company agreed to issue and sell, in a registered direct offering, an aggregate of 2,050,000 shares of common stock of the Company at an offering price of \$2.07 per share for gross proceeds of \$4,243,500 before the deduction of the placement agent fee and offering expenses. In addition, the Company sold Pre-Funded Series CCC Warrants to purchase 385,000 shares of common stock (and the shares of common stock issuable upon exercise of the Pre-Funded Series CCC Warrants), in lieu of shares of common stock to the extent that the purchase of common stock would cause the beneficial ownership of the Purchaser, together with its affiliates and certain related parties, to exceed 9.99% of our common stock. The Pre-Funded Series CCC Warrants were sold at an offering price of \$2.06 per share for gross proceeds of \$793,100, are immediately exercisable for \$0.01 per share of common stock and do not have an expiration date. In a concurrent private placement, the Company agreed to issue to each investor, for each share of common stock and pre-funded warrant purchased in the offering, a Series AAA Warrant and Series BBB Warrant, each to purchase one share of common stock. The Series AAA Warrants are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series AAA Warrants have an exercise price of \$2.07 per share and are exercisable to purchase an aggregate of 2,435,000 shares of common stock. The Series BBB Warrants are immediately exercisable following issuance, and terminate twelve months following issuance. The Series BBB Warrants have an exercise price of \$4.75 per share and are exercisable to purchase an aggregate of 2,435,000 shares of common stock. Subject to limited exceptions, a holder of a Series AAA and Series BBB Warrant will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise.

During the third quarter of 2017, all 385,000 of the Series CCC Pre-Funded warrants were exercised in full. As more fully described in Note 15, all the Series AAA and Series BBB Warrants were exercised as their respective strike prices in October 2017 and the Company received \$16.6 million in gross proceeds.

February 14, 2017 Public Offering

On February 14, 2017, the Company entered into a securities purchase agreement whereby it sold, in a public offering (the February 14, 2017 Public Offering), an aggregate of 1,384,704 shares of common stock of the Company at an offering price of \$3.22 per share. In addition, the Company sold Series AA Warrants (the Series AA Warrants) to purchase up to 1,177,790 shares of common stock and Pre-Funded Series BB Warrants (the Pre-Funded Series BB Warrants) to purchase up to 185,713 shares of common stock. The Series AA Warrants have an exercise price of \$3.22 per share, have a five year life and are immediately exercisable. The Pre-Funded Series BB Warrants were offered at \$3.08 per share, were immediately exercisable for \$0.14 per share of common stock, do not have an expiration date and were issued in lieu of shares of common stock to the extent that the purchase of common stock would cause the beneficial ownership of the purchaser of such shares, together with its affiliates and certain related parties, to exceed 9.99% of our common stock. The Company received approximately \$5.0 million in gross proceeds before the deduction of the placement agent fees and offering expenses (excluding any proceeds from the exercise of the warrants) in the February 14, 2017 Public Offering.

In connection with the February 14, 2017 Public Offering, the Company filed with the Securities and Exchange Commission a registration statement on Form S-1 (Registration No. 333-215321) on December 23, 2016, as amended by Pre-Effective Amendment No. 1 filed with the Commission on January 20, 2017, as further amended by Pre-Effective Amendment No. 2 filed with the Commission on February 13, 2017, as further amended by Pre-Effective Amendment No. 3 filed with the Commission on February 13, 2017 and as further amended by Pre-Effective Amendment No. 4 filed with the Commission on February 14, 2017 for the registration of the securities issued and sold under the Securities Act of 1933, as amended.

During the first nine months of 2017, all 185,713 of the Series BB Pre-Funded warrants were exercised in full. During the first nine months of 2017, we received approximately \$2.1 million from the exercise of Series AA Warrants to purchase 638,809 shares of common stock.

December 2016 Common Stock Offering

On December 20, 2016, the Company entered into a securities purchase agreement with certain investors, pursuant to which the Company sold and issued on December 23, 2016, in a registered direct offering, an aggregate of 367,346 shares of the Company's common stock at an offering price of \$4.90 per share for gross proceeds of approximately \$1.8 million before the deduction of the placement agent fee and offering expenses (the "December 2016 Offering"). In a concurrent private placement (the "Private Placement Transaction"), the Company agreed to issue to the investors certain warrants at an exercise price of \$6.44 per share (the December 2016 Warrants). The December 2016 Warrants are exercisable to purchase common stock for an aggregate of 367,343 shares of common stock. The warrants are initially exercisable six months following issuance and terminate five and one-half years following the date of issuance. The December 2016 Warrants may be exercised from time to time beginning on June 20, 2017 and expire on June 20, 2022. On April 5, 2017, the Company filed a registration statement on Form S-1 for the resale of any share of common stock issued upon exercise of the December 2016 Warrants on Form S-1 (File No. 333-217156) which was declared effective by the SEC on April 19, 2017. As more fully discussed below, all the December 2016 Warrants were exercised in June 2017.

The private placement of the December 2016 Warrants was structured to comply with the requirements of Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

June 2016 Common Stock Offering

On June 13, 2016, the Company entered into a securities purchase agreement with investors, pursuant to which the Company issued and sold, in a registered direct offering, an aggregate of 165,126 shares of common stock, par value \$0.01 per share, of the Company at an offering price of \$19.04 per share for gross proceeds of approximately \$6.0 million before the deduction of the placement agent fee and offering expenses. In a concurrent private placement, the Company issued to the investor Series A warrants (the "June 2016 Series A Warrants"), each to purchase 0.5 share of the Company's common stock, Series C warrants (the "June 2016 Series C Warrants"), each to purchase one share of the Company's common stock, and Series D warrants (the "June 2016 Series D Warrants"), each to purchase 0.5 share of the Company's common stock (collectively, the "June 2016 Warrants"). The June 2016 Series A Warrants are initially exercisable six months following issuance and terminate five and one-half years following issuance. The June 2016 Series C Warrants are initially exercisable six months following issuance and terminate one year following issuance. The June 2016 Series D Warrants only become exercisable ratably upon the exercise of the June 2016 Series C Warrants, are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The June 2016 Warrants have an exercise price of \$19.60 per share and are exercisable to purchase an aggregate of 630,252 shares of Common Stock. On October 31, 2016, the Company filed a registration statement on Form S-1 for the resale of any share of common stock issued upon exercise of the warrants on Form S-1 (File No. 333-212353) which was declared effective by the SEC on November 16, 2016. As more fully discussed below, all the June 2016 Warrants were exercised in June 2017.

The private placement of the June 2016 Warrants was structured to comply with the requirements of Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

Reduced Exercise Price of Warrants

On February 22, 2013, the Company entered into a securities purchase agreement with certain investors pursuant to which the Company agreed, among other things, to issue warrants (the "2013 Warrants") to purchase up to 95,811 shares of our common stock at an exercise price of \$74.34 per share to such investors in a registered direct offering. On January 15, 2014, the Company entered into a securities purchase agreement with certain investors pursuant to which the Company agreed, among other things, to issue warrants (the "2014 Warrants") to purchase up to 64,348 shares of our common stock at an exercise price of \$57.40 per share to such investors in a registered direct offering. On June 9, 2017, the Company entered into warrant exercise agreements (the "Exercise Agreements") with certain holders of the 2013 Warrants, the 2014 Warrants and the June 2016 Warrants (the "Exercising Holders"), which Exercising Holders own, in the aggregate, warrants exercisable for 790,410 shares of our common stock. Pursuant to the Exercise Agreements, the Exercising Holders and the Company agreed that the Exercising Holders would exercise their 2013 Warrants, the 2014 Warrants and the June 2016 Warrants with respect to 790,410 shares of our common stock underlying such warrants for a reduced exercise price equal to \$2.70 per share. The Company received aggregate gross proceeds of approximately \$2.1 million from the exercise of the 2013 Warrants, the 2014 Warrants and the June 2016 Warrants by the Exercising Holders.

The reduced exercise price of the 2013 Warrants, the 2014 Warrants and the June 2016 Series C Warrants increased the fair value of the warrants by approximately \$0.2 million. This increase in fair value is recorded as a deemed dividend in additional paid in capital due to the retained deficit increased the net loss available to common shareholders on the consolidate statement of operations.

On May 27, 2015 entered into a securities purchase agreement with certain investors pursuant to which the Company agreed, among other things, to issue warrants (the "2015 Warrants") to purchase up to 139,284 shares of the Company's common stock at an exercise price of \$36.40 per share, to such investors in a registered direct offering. Between June 22, 2017 through June 26, 2017, the Company and holders of the 2015 Warrants and the December 2016 Warrants (the Exercising Investors) entered into agreements whereby the Company agreed that the Exercising investors would exercise their 2015 Warrants and the June 2016 Warrants with respect to 506,627 shares of our common stock underlying such warrants for a reduced exercise price equal to \$1.65 per share. The Company received aggregate gross proceeds of approximately \$0.8 million from the exercise of the 2015 Warrants and the June 2016 Warrants by the Exercising Investors.

The reduced exercise price of the 2015 Warrants increased the fair value of the warrants by approximately \$0.1 million. This increase in fair value is recorded as a deemed dividend in additional paid in capital due to the retained deficit increased the net loss available to common shareholders on the consolidate statement of operations.

Controlled Equity Offering

On February 1, 2013, the Company entered into a Controlled Equity Offering SM Sales Agreement (the "ATM Agreement") with Cantor Fitzgerald & Co., as sales agent ("Cantor"), pursuant to which Celsion may offer and sell, from time to time, through Cantor, shares of our common stock having an aggregate offering price of up to \$25.0 million (the "ATM Shares") pursuant to the Company's previously filed and effective Registration Statement on Form S-3. Under the ATM Agreement, Cantor may sell ATM Shares by any method deemed to be an "at-the-market" offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including sales made directly on The NASDAQ Capital Market, on any other existing trading market for the our common stock or to or through a market maker. From February 1, 2013 through September 30, 2017, the Company sold and issued an aggregate of 105,678 shares of common stock under the ATM Agreement, receiving approximately \$7.6 million in gross proceeds. In connection with the October 2017 Offering discussed below (Note 16), the Company has agreed not to sell any additional shares under the ATM Agreement for a period of two months after the closing of the October 2017 Offering which occurred on October 31, 2017.

The Company is not obligated to sell any ATM Shares under the ATM Agreement. Subject to the terms and conditions of the ATM Agreement, Cantor will use commercially reasonable efforts, consistent with its normal trading and sales practices and applicable state and federal law, rules and regulations and the rules of The NASDAQ Capital Market, to sell ATM Shares from time to time based upon the Company's instructions, including any price, time or size limits or other customary parameters or conditions the Company may impose. In addition, pursuant to the terms and conditions of the ATM Agreement and subject to the instructions of the Company, Cantor may sell ATM Shares by any other method permitted by law, including in privately negotiated transactions.

The ATM Agreement will terminate upon the earlier of (i) the sale of ATM Shares under the ATM Agreement having an aggregate offering price of \$25 million and (ii) the termination of the ATM Agreement by Cantor or the Company. The ATM Agreement may be terminated by Cantor or the Company at any time upon 10 days' notice to the other party, or by Cantor at any time in certain circumstances, including the occurrence of a material adverse change in the Company. The Company pays Cantor a commission of 3.0% of the aggregate gross proceeds from each sale of ATM Shares and has agreed to provide Cantor with customary indemnification and contribution rights. The Company also reimbursed Cantor for legal fees and disbursements of \$50,000 in connection with entering into the ATM Agreement.

On October 2, 2015, we filed a prospectus supplement to the base prospectus that forms a part of the 2015 Shelf Registration Statement, pursuant to which we may offer and sell up to \$7.5 million of shares of common stock from time to time under the ATM Agreement of the \$17.4 million remaining under the ATM Agreement.

Note 11 . Stock-Based Compensation

Stock Options Plans

The Company has long-term compensation plans that permit the granting of incentive awards in the form of stock options. Generally, the terms of these plans require that the exercise price of the options may not be less than the fair market value of Celsion's common stock on the date the options are granted. Options granted generally vest over various time frames or upon milestone accomplishments. The Company's options generally expire ten years from the date of the grant.

The Celsion Corporation 2007 Stock Incentive Plan (the 2007 Plan), as adopted and amended, permits the granting of 688,531 shares of stock as equity awards in the form of incentive stock options, nonqualified stock options, restricted stock, restricted stock units, stock appreciation rights, phantom stock, and performance awards, or in any combination of the foregoing.

In 2007, the Company adopted the Celsion Corporation 2007 Stock Incentive Plan (the 2007 Plan) under which 15,873 shares were authorized for issuance. The purpose of the 2007 Plan is to promote the long-term growth and profitability of the Company by providing incentives to improve stockholder value and enable the Company to attract, retain and reward the best available persons for positions of substantial responsibility. The 2007 Plan permits the granting of equity awards in the form of incentive stock options, nonqualified stock options, restricted stock, restricted stock units, stock appreciation rights, phantom stock, and performance awards, or in any combination of the foregoing. At the Annual Meetings of Stockholders of Celsion held on June 25, 2010, June 7, 2012, June 20, 2014, and May 16, 2017 the stockholders approved amendments to the Plan. The only material difference between the original Plan and the amended Plan was the number of shares of common stock available for issuance under the amended Plan which was increased by 15,873 to a total of 31,746 shares in 2010, by 35,714 to a total of 67,460 shares in 2012, by 178,571 to a total of 246,031 shares in 2014 and by 442,500 to a total of 688,531 shares in 2017.

Prior to the adoption of the 2007 Plan, the Company adopted two stock plans for directors, officers and employees (one in 2001 and another in 2004) under which 21,164 shares collectively were reserved for future issuance under both of these plans. As these plans have been superseded by the 2007 Plan, any options previously granted which expire, forfeit, or cancel under these plans will be rolled into the 2007 Plan.

A summary of the Company's stock option and restricted stock awards for the nine months ended September 30, 2017 is as follows:

	Stock Options		Restricted Stock Awards		Weighted Average Contractual Terms of Equity Awards (in years)
	Options Outstanding	Weighted Average Exercise Price	Non-vested Restricted Stock Outstanding	Weighted Average Grant Date Fair Value	
Equity Awards					
Equity awards outstanding at December 31, 2016	210,023	\$ 59.77	4,785	\$ 37.42	
Equity awards granted	513,464	\$ 2.69	(3,357)	42.20	
Equity awards forfeited, cancelled or expired	(43,735)	\$ 164.12	(1,428)	\$ 26.18	
Equity awards outstanding at September 30, 2017	<u>679,752</u>	\$ 9.94	<u>—</u>	\$ —	9.40
Aggregate intrinsic value of outstanding awards at September 30, 2017	<u>\$ —</u>		<u>\$ —</u>		
Equity awards exercisable at September 30, 2017	<u>401,920</u>	\$ 13.83			9.13
Aggregate intrinsic value of awards exercisable at September 30, 2017	<u>\$ —</u>				

The fair values of stock options granted were estimated at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model was originally developed for use in estimating the fair value of traded options, which have different characteristics from Celsion's stock options. The model is also sensitive to changes in assumptions, which can materially affect the fair value estimate.

The Company used the following assumptions for determining the fair value of options granted during the nine months ended September 30, 2017 and 2016 under the Black-Scholes option pricing model:

	Nine Months Ended			
	September 30,			
	2017		2016	
Risk-free interest rate	2.21%	1.55%	—	1.87%
Expected volatility	90.4%	87.4%	—	89.1%
Expected life (in years)	10.00		10.00	
Expected forfeiture rate	—%		10%	
Expected dividend yield	—%		—%	

Expected volatilities utilized in the model are based on historical volatility of the Company's stock price. The risk free interest rate is derived from values assigned to U.S. Treasury bonds with terms that approximate the expected option lives in effect at the time of grant. The model incorporated exercise, pre-vesting and post-vesting forfeiture assumptions based on analysis of historical data for forfeitures through FY 2016. Starting in FY 2017, the Company made the election to account for any forfeitures when they occur. The expiration of each option granted in fiscal 2016 and 2017 was used as the expected life.

Total compensation cost related to employee stock options and restricted stock awards totaled \$146,896 and \$432,573 for the three months ended September 30, 2017 and 2016, respectively. Total compensation cost related to employee stock options and restricted stock awards totaled \$951,488 and \$1,331,094 for the nine months ended September 30, 2017 and 2016, respectively. No compensation cost related to share-based payments arrangements was capitalized as part of the cost of any asset as of September 30, 2017 and 2016.

As of September 30, 2017, there was \$0.5 million of total unrecognized compensation cost related to non-vested share-based compensation arrangements. That cost is expected to be recognized over a weighted-average period of 1.1 years. The weighted average grant-date fair value was \$2.69 and 16.24 per share for the options granted during the nine months ended September 30, 2017 and 2016, respectively.

Collectively, for all of the Company's stock option plans there were a total of 29,498 equity awards available for future issuance as of September 30, 2017.

Note 12. Earn-out Milestone Liability

The total aggregate purchase price for the EGEN Acquisition included potential future Earn-out Payments contingent upon achievement of certain milestones. The difference between the aggregate \$30.4 million in future Earn-out Payments and the \$13.9 million included in the fair value of the acquisition consideration at June 20, 2014 was based on the Company's risk-adjusted assessment of each milestone (10% to 67%) and utilizing a discount rate based on the estimated time to achieve the milestone (1.5 to 2.5 years). The earn-out milestone liability will be fair valued at the end of each quarter and any change in their value will be recognized in the condensed consolidated financial statements.

As of September 30, 2017, June 30, 2017 and December 31, 2016, the Company fair valued these milestones at \$12.5 million, \$13.8 million and \$13.2 million, respectively, and recognized a non-cash benefit of \$1,246,151 and \$670,172 during the three and nine months ended September 30, 2017 as a result of the change in the fair value of these milestones from the beginning of each period respectively.

As of September 30, 2016, June 30, 2016 and December 31, 2015, the Company fair valued these milestones at \$14.5 million, \$13.8 million and \$13.9 million, respectively, and recognized a non-cash charge of \$662,410 and \$556,382 during the three and nine month periods ended September 30, 2016, respectively, as a result of the change in the fair value of these milestones from the beginning of each period respectively.

The following is a summary of the changes in the earn-out milestone liability for 2017:

Balance at January 1, 2017	\$ 13,188,226
Non-cash benefit from the adjustment for the change in fair value included in net loss	(1,246,151)
Balance at September 30, 2017	<u>\$ 12,518,054</u>

The following is a schedule of the Company's risk-adjustment assessment of each milestone:

Date	Risk-adjustment Assessment of each Milestone	Discount Rate	Estimated Time to Achieve (years)
September 30, 2017	35% to 80%	9%	1.25 to 1.75
June 30, 2017	50% to 80%	9%	1.50 to 2.00
December 31, 2016	50% to 80%	9%	2.00 to 2.50
September 30, 2016	10% to 75%	9%	0.50 to 1.75
June 30, 2016	10% to 75%	9%	0.50 to 2.00
December 31, 2015	10% to 75%	9%	0.50 to 2.50

Note 13. Warrants

Common Stock Warrants

Following is a summary of all warrant activity for the nine months ended September 30, 2017:

Warrants	Number of Warrants Issued	Weighted Average Exercise Price
Warrants outstanding at December 31, 2016	1,487,958	\$ 9.39
Warrants issued during the nine months ended September 30, 2017 (see Note 10)	6,679,378	3.08
Warrants exercised during the nine months ended September 30, 2017 (see Note 10)	<u>(2,638,702)</u>	1.92
Warrants outstanding at September 30, 2017	<u>5,528,634</u>	\$ 5.33
Aggregate intrinsic value of outstanding warrants at September 30, 2017	<u>—</u>	
Weighted average remaining contractual terms at September 30, 2017 (in years)	<u>3.16</u>	

Note 14. Contingent Liabilities and Commitments

In July 2011, the Company executed a lease (the "Lease") with Brandywine Operating Partnership, L.P. (Brandywine), a Delaware limited partnership for a 10,870 square foot premises located in Lawrenceville, New Jersey. In October 2011, the Company relocated its offices to Lawrenceville, New Jersey from Columbia, Maryland. The lease has a term of 66 months and provides for 6 months of rent free, with the first monthly rent payment of approximately \$23,000 due and paid in April 2012. Also, as required by the Lease, the Company provided Brandywine with an irrevocable and unconditional standby letter of credit for \$250,000, which the Company secured with an escrow deposit at its banking institution of this same amount. The standby letter of credit will be reduced by \$50,000 on each of the 19th, 31st and 43rd months from the initial term, with the remaining \$100,000 amount remaining until the Lease term has expired. In connection with three \$50,000 reductions of the standby letter of credit in April 2013 and 2014 and 2015, the Company reduced the escrow deposit by \$50,000 each time. In late 2015, Lenox Drive Office Park LLC, purchased the real estate and office building and assumed the lease. This lease was set to expire on April 30, 2017. In April 2017, the Company and the landlord amended the Lease effective May 1, 2017. The Lease amendment extended the term for an additional 64 months, reduced the premises to 7,565 square feet, reduced the monthly rent and provided four months free rent. The monthly rent will range from approximately \$18,900 in the first year to approximately \$20,500 in the final year of the amendment. The Company also has a one-time option to cancel the lease as of the 24th month after the commencement date of the Lease amendment.

In connection with the EGEN Asset Purchase agreement in June 2014, the Company assumed the existing lease with another landlord for an 11,500 square foot premises located in Huntsville Alabama. This lease has a remaining term of four months with rent payments of approximately \$23,200 per month. The Company is currently in discussions with the landlord to extend and modify its lease in Huntsville, Alabama.

Note 15. Technology Development and Licensing Agreements

On May 7, 2012 the Company entered into a long term commercial supply agreement with Zhejiang Hisun Pharmaceutical Co. Ltd. (Hisun) for the production of ThermoDox® in the China territory. In accordance with the terms of the agreement, Hisun will be responsible for providing all of the technical and regulatory support services, including the costs of all technical transfer, registration and bioequivalence studies, technical transfer costs, Celsion consultative support costs and the purchase of any necessary equipment and additional facility costs necessary to support capacity requirements for the manufacture of ThermoDox®. Celsion will repay Hisun for the aggregate amount of these development costs and fees commencing on the successful completion of three registration batches of ThermoDox®. Hisun is also obligated to certain performance requirements under the agreement. The agreement will initially be limited to a percentage of the production requirements of ThermoDox® in the China territory with Hisun retaining an option for additional global supply after local regulatory approval in the China territory. In addition, Hisun will collaborate with Celsion around the regulatory approval activities for ThermoDox® with the China State Food and Drug Administration (CHINA FDA). During the first quarter of 2015, Hisun completed the successful manufacture of three registration batches of ThermoDox® and the Company accrued \$685,787 for the aggregate development costs and fees associated with these batches in March 2015. This amount was paid in April 2015.

On January 18, 2013, we entered into a technology development contract with Hisun, pursuant to which Hisun paid us a non-refundable research and development fee of \$5 million to support our development of ThermoDox® in mainland China, Hong Kong and Macau (the China territory). Following our announcement on January 31, 2013 that the HEAT study failed to meet its primary endpoint, Celsion and Hisun have agreed that the Technology Development Contract entered into on January 18, 2013 will remain in effect while the parties continue to collaborate and are evaluating the next steps in relation to ThermoDox®, which include the sub-group analysis of patients in the Phase III HEAT Study for the hepatocellular carcinoma clinical indication and other activities to further the development of ThermoDox® for the Greater China market. The \$5.0 million received as a non-refundable payment from Hisun in the first quarter 2013 has been recorded to deferred revenue and will continue to be amortized over the 10 year term of the agreement, until such time as the parties find a mutually acceptable path forward on the development of ThermoDox® based on findings of the ongoing post-study analysis of the HEAT Study data.

On July 19, 2013, the Company and Hisun entered into a Memorandum of Understanding to pursue ongoing collaborations for the continued clinical development of ThermoDox® as well as the technology transfer relating to the commercial manufacture of ThermoDox® for the China territory. This expanded collaboration includes development of the next generation liposomal formulation with the goal of creating safer, more efficacious versions of marketed cancer chemotherapeutics.

Among the key provisions of the Celsion-Hisun Memorandum of Understanding are:

- Hisun will provide the Company with non-dilutive financing and the investment necessary to complete the technology transfer of its proprietary manufacturing process and the production of registration batches for the China territory;
- Hisun will collaborate with the Company around the clinical and regulatory approval activities for ThermoDox® as well as other liposomal formulations with the CHINA FDA; and
- Hisun will be granted a right of first offer for a commercial license to ThermoDox® for the sale and distribution of ThermoDox® in the China territory.

On August 8, 2016, we signed a Technology Transfer, Manufacturing and Commercial Supply Agreement (“GEN-1 Agreement”) with Hisun to pursue an expanded partnership for the technology transfer relating to the clinical and commercial manufacture and supply of GEN-1, Celsion’s proprietary gene mediated, IL-12 immunotherapy, for the greater China territory, with the option to expand into other countries in the rest of the world after all necessary regulatory approvals are in effect. The GEN-1 Agreement will help to support supply for both ongoing and planned clinical studies in the U.S., and for potential future studies of GEN-1 in China. GEN-1 is currently being evaluated by Celsion in first line ovarian cancer patients.

Key provisions of the GEN-1 Agreement are as follows:

- the GEN-1 Agreement has targeted unit costs for clinical supplies of GEN-1 that are substantially competitive with the Company’s current suppliers;
- once approved, the cost structure for GEN-1 will support rapid market adoption and significant gross margins across global markets;

- Celsion will provide Hisun a certain percentage of China’s commercial unit demand, and separately of global commercial unit demand, subject to regulatory approval;
- Hisun and Celsion will commence technology transfer activities relating to the manufacture of GEN-1, including all studies required by CFDA for site approval; and
- Hisun will collaborate with Celsion around the regulatory approval activities for GEN-1 with the CFDA. A local China partner affords Celsion access to accelerated CFDA review and potential regulatory exclusivity for the approved indication.

Note 16. Subsequent Events

October 2017 Warrant Exercises

On October 4, 2017, the Company entered into letter agreements (the “Exercise Agreements”) with the holders of the Series AAA and Series BBB Warrants issued in the July 6, 2017 Common Stock Offering (the “Exercising Holders”) (Note 10). The Exercise Agreements amended the Series AAA Warrants to permit their immediate exercise. Prior to the execution of the Exercise Agreements, the Series AAA Warrants were not exercisable until January 11, 2018. Pursuant to the Exercise Agreements, the Exercising Holders and the Company agreed that the Exercising Holders would exercise all of their Existing Warrants with respect to 4,665,000 shares of Common Stock underlying such Existing Warrants. The Series AAA Warrants and Series BBB Warrants were exercised at a price of \$2.07 per share and \$4.75 per share, respectively, which were their respective original exercise prices.

The Exercise Agreements also provide for the issuance of 1,166,250 Series DDD Warrants, each to purchase one share of Common Stock (the “Series DDD Warrants”). The Series DDD Warrants are initially exercisable no sooner than six months following issuance, and terminate six months following when the Series DDD Warrants are initially exercisable. The Series DDD Warrants have an exercise price no than less than \$6.20.

The Series DDD Warrants and the shares of Common Stock issuable upon the exercise of the Series DDD Warrants are not being registered under the Securities Act of 1933, as amended (the “Securities Act”), and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act or Rule 506(b) promulgated thereunder. Pursuant to the Exercise Agreements, the Series DDD Warrants shall be substantially in the form of the Existing Warrants and the Company will be required to register for resale the shares of Common Stock underlying the Series DDD Warrants.

In early October 2017, certain holders of the other 205,000 Series BBB Warrants and 108,455 Series AA Warrants from the February 14, 2017 Public Offering (Note 10) were exercised and, together with the exercise of the 4,665,000 Series AAA and Series BBB Warrants exercised by the Exercising Holders, the Company received aggregate gross proceeds of approximately \$20.0 million in October 2017.

October 2017 Underwritten Offering

On October 27, 2017, the Company entered into an underwriting agreement (the “Underwriting Agreement”) with Oppenheimer & Co. Inc. (the “Underwriter”), relating to the issuance and sale (the “Offering”) of 2,640,000 shares (the “Shares”) of the Company’s common stock, \$0.01 par value per share (the “Common Stock”), and warrants to purchase an aggregate of 1,320,000 shares of Common Stock. Each share of Common Stock is being sold together with 0.5 warrants (the “Investor Warrants”), each whole Investor Warrant being exercisable for one share of Common Stock, at an offering price of \$2.50 per share and related Investor Warrants.

Pursuant to the terms of the Underwriting Agreement, the Underwriter has agreed to purchase the Shares and related Investor Warrants from the Company at a price of \$2.325 per share and related Investor Warrants. Each Investor Warrant is exercisable six months from the date of issuance. The Investor Warrants have an exercise price of \$3.00 per whole share, and expire five years from the date first exercisable.

The Company received \$6.6 million of gross proceeds from the sale of the Shares and Investor Warrant. The Offering closed on October 31, 2017. This Offering was made pursuant to the Company’s effective shelf registration statement on Form S-3 (File No. 333-206789) filed with the Securities and Exchange Commission on September 4, 2015, and declared effective on September 25, 2015, including the base prospectus dated September 25, 2017 included therein and the related prospectus supplement.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act, other obligations of the parties, and termination provisions. The Company also agreed to issue to the Underwriter warrants to purchase up to 66,000 shares of the Company’s common stock, such issuance being exempt from registration pursuant to Section 4(a)(2) of the Securities Act.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Forward-Looking Statements

Statements and terms such as "expect", "anticipate", "estimate", "plan", "believe" and words of similar import regarding our expectations as to the development and effectiveness of our 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, 2016 filed with the Securities and Exchange Commission (SEC) on March 24, 2017, which factors include, without limitation, plans and objectives of management for future operations or programs or proposed new products or services; changes in the course of research and development activities and in clinical trials; possible changes in cost and timing of development and testing; possible changes in capital structure, financial condition, working capital needs and other financial items; changes in approaches to medical treatment; clinical trial analysis and future plans relating thereto; our ability to realize the full extent of the anticipated benefits of our acquisition of substantially all of the assets of EGEN, Inc., including achieving operational cost savings and synergies in light of any delays we may encounter in the integration process and additional unforeseen expenses; introduction of new products by others; possible licenses or acquisitions of other technologies, assets or businesses; and possible actions by customers, suppliers, partners, competitors and regulatory authorities. These and other risks and uncertainties could cause actual results to differ materially from those indicated by forward-looking statements.

The discussion of risks and uncertainties set forth in this Quarterly Report on Form 10-Q and in our most recent Annual Report on Form 10-K, as well as in other filings with the SEC, is not 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 constantly evolving. 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.

Strategic and Clinical Overview

Celsion is a fully-integrated development stage oncology drug company focused on advancing a portfolio of innovative cancer treatments, including directed chemotherapies, DNA-mediated immunotherapy and RNA based therapies. Our lead product candidate is ThermoDox®, a proprietary heat-activated liposomal encapsulation of doxorubicin, currently in a Phase III clinical trial for the treatment of primary liver cancer (the OPTIMA Study). Second in our pipeline is GEN-1, a DNA-mediated immunotherapy for the localized treatment of ovarian and brain cancers. We have two platform technologies providing the basis for the future development of a range of therapeutics for difficult-to-treat forms of cancer including: Lysolipid Thermally Sensitive Liposomes, a heat sensitive liposomal based dosage form that targets disease with known therapeutics in the presence of mild heat and TheraPlas, a novel nucleic acid-based treatment for local transfection of therapeutic plasmids. With these technologies we are working to develop and commercialize more efficient, effective and targeted oncology therapies that maximize efficacy while minimizing side-effects common to cancer treatments.

ThermoDox®

ThermoDox® is being evaluated in a Phase III clinical trial for primary liver cancer, which we call the OPTIMA Study, which was initiated in 2014 and a Phase II clinical trial for recurrent chest wall breast cancer. ThermoDox® is a liposomal encapsulation of doxorubicin, an approved and frequently used oncology drug for the treatment of a wide range of cancers. Localized heat at hyperthermia temperatures (greater than 40° Celsius) releases the encapsulated doxorubicin from the liposome enabling high concentrations of doxorubicin to be deposited preferentially in and around the targeted tumor.

The OPTIMA Study. The OPTIMA Study represents an evaluation of ThermoDox® in combination with a first line therapy, radio frequency ablation (RFA), for newly diagnosed, intermediate stage HCC patients. HCC incidence globally is approximately 850,000 new cases per year and is the third largest cancer indication globally. Approximately 30% of newly diagnosed patients can be addressed with RFA alone.

On February 24, 2014, we announced that the United States Food and Drug Administration (the “FDA”), after its customary 30-day review period, provided clearance for the OPTIMA Study, which is a pivotal, double-blind, placebo-controlled Phase III trial of ThermoDox®, in combination with standardized RFA, for the treatment of primary liver cancer. The trial design of the OPTIMA Study is based on the comprehensive analysis of data from an earlier clinical trial called the HEAT Study, which is described below. The OPTIMA Study is supported by a hypothesis developed from an overall survival analysis of a large subgroup of patients from the HEAT Study.

We initiated the OPTIMA Study in the first half of 2014. The OPTIMA Study was designed with extensive input from globally recognized hepatocellular carcinoma (“HCC”) researchers and expert clinicians and after receiving formal written consultation from the FDA. The OPTIMA Study is expected to enroll up to 550 patients globally at up to 70 sites in the United States, Canada, Europe Union, China and other countries in the Asia-Pacific region, and will evaluate ThermoDox® in combination with standardized RFA, which will require a minimum of 45 minutes across all investigators and clinical sites for treating lesions three to seven centimeters, versus standardized RFA alone. The primary endpoint for this clinical trial is overall survival (“OS”), and the secondary endpoints are progression free survival and safety. The statistical plan calls for two interim efficacy analyses by an independent Data Monitoring Committee (DMC).

On December 16, 2015, we announced that we had received the clinical trial application approval from the China Food and Drug Administration (the “CFDA”) to conduct the OPTIMA Study in China. This clinical trial application approval will allow Celsion to enroll patients at up to 20 clinical sites in China. On April 26, 2016, we announced that the first patient in China had been enrolled in the OPTIMA Study. Results from the OPTIMA Study, if successful, will provide the basis for a global registration filing and marketing approval.

On August 7, 2017, the Company announced that the independent Data Monitoring Committee (DMC) for the Company's OPTIMA Study completed a regularly scheduled review of the first 50% of patients enrolled in the trial and has unanimously recommended that the OPTIMA Study continue according to protocol to its final data readout. The DMC reviewed study data at regular intervals, with the primary responsibilities of ensuring the safety of all patients enrolled in the study, the quality of the data collected, and the continued scientific validity of the study design. As part of its review of the first 275 patients, the DMC monitored a quality matrix relating to the total clinical data set, confirming the timely collection of data, that all data are current as well as other data collection and quality criteria.

The Company hosted an Investigators Meeting with physicians in South East Asia and key opinion leaders on July 22-23, 2017 in Bangkok, Thailand. A second Investigators Meeting was held on September 23, 2017 with physicians in China. The Company has initiated approximately 70 clinical sites in 14 countries with plans to activate up to 8 additional clinical trial sites in China or Vietnam by the end of 2017. In addition, the Company announced that patient enrollment in the 550 patient Phase III global study has reached over 67%. Based on current enrollment rates, the Company expects to complete enrollment of the study by mid-2018.

Post-hoc data analysis from the Company’s earlier Phase III HEAT Study suggest that ThermoDox® may substantially improve OS, when compared to the control group, in patients if their lesions undergo a 45 minute RFA procedure standardized for a lesion greater than 3 cm in diameter. Data from nine OS sweeps have been conducted since the top line progression free survival (“PFS”) data from the HEAT Study were announced in January 2013, with each data set demonstrating substantial improvement in clinical benefit over the control group with statistical significance. On August 15, 2016, the Company announced updated results from its final retrospective OS analysis of the data from the HEAT Study. These results demonstrated that in a large, well bounded, subgroup of patients with a single lesion (n=285, 41% of the HEAT Study patients), treatment with a combination of ThermoDox® and optimized RFA provided an average 54% risk improvement in OS compared to optimized RFA alone. The Hazard Ratio (“HR”) at this analysis is 0.65 (95% CI 0.45 - 0.94) with a p-value of 0.02. Median OS for the ThermoDox® group has been reached which translates into a two year survival benefit over the optimized RFA group (projected to be greater than 80 months for the ThermoDox® plus optimized RFA group compared to less than 60 months projection for the optimized RFA only group).

Additional findings from this most recent analysis specific to the Chinese patient cohort of 223 patients are summarized below:

- In the population of 154 patients with a single lesion who received optimized RFA treatment for 45 minutes or more showed a 53% risk improvement in OS (HR = 0.66) when treated with ThermoDox® plus optimized RFA.
- These data continue to support and further strengthen ThermoDox®’s potential to significantly improve OS compared to an RFA control in patients with lesions that undergo optimized RFA treatment for 45 minutes or more. The clinical benefit seen in the intent-to-treat Chinese patient cohort further confirms the importance of RFA heating time as 72% of patients in this large patient cohort in China received an optimized RFA treatment.

While this information should be viewed with caution since it is based on a retrospective analysis of a subgroup, we also conducted additional analyses that further strengthen the evidence for the HEAT Study sub-group. We commissioned an independent computational model at the University of South Carolina Medical School. The results indicate that longer RFA heating times correlate with significant increases in doxorubicin concentration around the RFA treated tissue. In addition, we conducted a prospective preclinical study in 22 pigs using two different manufacturers of RFA and human equivalent doses of ThermoDox® that clearly support the relationship between increased heating duration and doxorubicin concentrations.

On November 29, 2016, the Company announced the results of an independent analysis conducted by the National Institutes of Health (the “NIH”) from the HEAT Study which reaffirmed the correlation between increased RFA burn time per tumor volume and improvements in overall survival. The NIH analysis, which sought to evaluate the correlation between RFA burn time per tumor volume (min/ml) and clinical outcome, concluded that increased burn time per tumor volume significantly improved overall survival in patients treated with RFA plus ThermoDox® compared to patients treated with RFA alone. For all patients with single lesions treated with RFA plus ThermoDox®:

- One unit increase in RFA duration per tumor volume improved overall survival by 20% (p=0.017; n=227);
- More significant differences in subgroup of patients with RFA burn times per tumor volume greater than 2.5 minutes per ml;
- Cox multiple covariate analysis showed overall survival to be significant (p=0.038; Hazard Ratio = 0.85); and
- Burn time per tumor volume did not have a significant effect on overall survival in single lesion patients treated with RFA only.

The HEAT Study. On January 31, 2013, the Company announced that the HEAT Study, ThermoDox® in combination with RFA, did not meet the primary endpoint, PFS, of a Phase III clinical trial enrolling 701 patients with primary liver cancer. This determination was made after conferring with the HEAT Study independent DMC, that the HEAT Study did not meet the goal of demonstrating a clinically meaningful improvement in progression free survival. In the trial, ThermoDox® was well-tolerated with no unexpected serious adverse events. Following the announcement of the HEAT Study results, we continued to follow patients for OS, the secondary endpoint of the HEAT Study. We have conducted a comprehensive analysis of the data from the HEAT Study to assess the future strategic value and development strategy for ThermoDox®.

The DIGNITY Study. On December 14, 2015, we announced final data from our ongoing DIGNITY study, which is an open-label, dose-escalating Phase II trial of ThermoDox® in patients with recurrent chest wall (“RCW”) breast cancer. The DIGNITY Study was designed to establish a safe therapeutic dose in Phase I, and to demonstrate local control in Phase II, including complete and partial responses, and stable disease as its primary endpoint. The DIGNITY Study was also designed to evaluate kinetics in ThermoDox® produced from more than one manufacturing site. Of the 29 patients enrolled and treated, 21 patients were eligible for evaluation of efficacy. Approximately 62% of evaluable patients experienced a local response, including six complete responses and seven partial responses.

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 “Asset Purchase Agreement”). We 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 Asset Purchase Agreement. At the closing, we paid approximately \$3.0 million in cash after the expense adjustment and issued 193,728 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, pursuant to Section 4(2) thereof. In addition, the Company held back 47,862 shares of common stock issuable to EGEN pending satisfactory resolution of any post-closing adjustments of expenses and EGEN’s indemnification obligations under the EGEN Purchase Agreement (Holdback Shares). These shares were issued on June 16, 2017.

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 upon achievement of three major milestone events as follows:

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

- \$12.0 million will become payable upon achieving certain specified development milestones relating to a GEN-1 glioblastoma multiforme brain cancer study to be conducted by us or our subsidiary; and
- up to \$6.0 million will become payable upon achieving certain specified milestones relating to the TheraSilence technology acquired from EGEN in the acquisition.

Our obligations to make the earnout payments will terminate on the seventh anniversary of the closing date. In the acquisition, we purchased GEN-1, a DNA-based immunotherapy for the localized treatment of ovarian and brain cancers, and two platform technologies for the development of treatments for those suffering with difficult-to-treat forms of cancer, novel nucleic acid-based immunotherapies and other anti-cancer DNA or RNA therapies, including TheraPlas and TheraSilence.

GEN-1

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

- Loco-regional production of the potent cytokine IL-12 avoids toxicities and poor pharmacokinetics associated with systemic delivery of recombinant IL-12
- Persistent local delivery of IL-12 lasts up to one week and dosing can be repeated
- Ideal for long-term maintenance therapy

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

- infiltration of cancer fighting T-cell lymphocytes into primary tumor and tumor microenvironment including peritoneal cavity, which is the primary site of metastasis of ovarian cancer;
- changes in local and systemic levels of immuno-stimulatory and immunosuppressive cytokines associated with tumor suppression and growth, respectively; and
- expression profile of a comprehensive panel of immune related genes in pre-treatment and GEN-1-treated tumor tissue.

We initiated the OVATION Study at four clinical sites at the University of Alabama at Birmingham, Oklahoma University Medical Center, Washington University in St. Louis and the Medical College of Wisconsin.

On October 3, 2017, we announced final clinical and translational research data from its OVATION Study combining GEN-1 with the standard of care for the treatment of newly-diagnosed patients with advanced Stage III/IV ovarian cancer who will undergo neoadjuvant chemotherapy followed by interval debulking surgery.

Key translational research findings from all evaluable patients are consistent with the earlier reports from partial analysis of the data and are summarized below:

- The intraperitoneal treatment of GEN-1 in conjunction with neoadjuvant chemotherapy resulted in dose dependent increases in IL-12 and Interferon-gamma (IFN-g) levels that were predominantly in the peritoneal fluid compartment with little to no changes observed in the patients' systemic circulation. These and other post-treatment changes including decreases in VEGF levels in peritoneal fluid are consistent with an IL-12 based immune mechanism.
- Consistent with the previous partial reports, the effects observed in the IHC analysis were pronounced decreases in the density of immunosuppressive T-cell signals (Foxp3, PD-1, PDL-1, IDO-1) and increases in CD8+ cells in the tumor microenvironment.
- The ratio of CD8+ cells to immunosuppressive cells was increased in approximately 75% of patients suggesting an overall shift in the tumor microenvironment from immunosuppressive to pro-immune stimulatory following treatment with GEN-1. An increase in CD8+ to immunosuppressive T-cell populations is a leading indicator and believed to be a good predictor of improved overall survival.
- Analysis of peritoneal fluid by cell sorting, not reported before, shows treatment-related decrease in the percentage of immunosuppressive T-cell (Foxp3+), which is consistent with the reduction of Foxp3+ T-cells in the primary tumor tissue, and a shift in tumor naïve CD8+ cell population to more efficient tumor killing memory effector CD8+ cells.

We also reported highly encouraging clinical data from the first fourteen patients who have completed treatment in the OVATION Study. GEN-1 plus standard chemotherapy produced positive clinical results, with no dose limiting toxicities and promising dose dependent efficacy signals which correlate well with successful surgical outcomes as summarized below:

- Of the fourteen patients treated to date in the entire study, two (2) patients demonstrated a complete response, ten (10) patients demonstrated a partial response and two (2) patients demonstrated stable disease, as measured by RECIST criteria. This translates to a 100% disease control rate (“DCR”) and an 86% objective response rate (“ORR”). Of the five patients treated in the highest dose cohort, there was a 100% objective response rate with one (1) complete response and four (4) partial responses.
- Fourteen patients had successful resections of their tumors, with nine (9) patients (64%) having an R0 resection, which indicates a microscopically margin-negative resection in which no gross or microscopic tumor remains in the tumor bed. Seven out of eight (87%) patients in the highest two dose cohorts experienced a R0 surgical resection. All five patients treated at the highest dose cohort experienced a R0 surgical resection.
- All patients experienced a clinically significant decrease in their CA-125 protein levels as of their most recent study visit. CA-125 is used to monitor certain cancers during and after treatment. CA-125 is present in greater concentrations in ovarian cancer cells than in other cells.
- Of the eight patients who have received GEN-1 treatment over one year ago (cohort 1 - 3) and are being followed only two patients' cancer has progressed. This compares favorably to the historical median progression free survival (PFS) of 12 months for newly-diagnosed patients with Stage III and IV ovarian cancer that undergo neoadjuvant chemotherapy followed by interval debulking surgery. Of the remaining six patients who have been on the study for over one year, their average PFS as of September 30, 2017 is 18 months with the longest progression-free patient at 24 months.

The Company also held an advisory board meeting on September 27, 2017 with the clinical investigators and scientific experts including those from Roswell Park Cancer Institute, Vanderbilt University Medical School, and M.D. Anderson Cancer Center to review and finalize clinical, translational research and safety data from the OVATION Study in order to determine the next steps forward for our GEN-1 immunotherapy. With the endorsement and recommendations from the advisory board, the Company expects to file a next phase protocol with FDA by the end of 2017.

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

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

- The preclinical studies indicated that no obvious overt toxicities were associated with the combined treatments of GEN-1 and Avastin®. The preclinical data are also consistent with the mechanism of action for GEN-1, which exhibits certain anti-angiogenic properties and suggests that combining GEN-1 with lower doses of Avastin® may enhance efficacy and help reduce the known toxicities associated with this anti-VEGF drug.
- The distinct biological activities of GEN-1 (immune stimulation) and Avastin® (inhibition of tumor blood vessel formation) also suggest scientific rationale for this combination approach. Additionally, the anti-angiogenic activity of GEN-1 mediated through up regulation of the interferon gamma (“IFN-g”) pathway may help to explain the synergy between GEN-1 and Avastin® and potentially addresses the VEGF escape mechanisms associated with resistance to Avastin® therapy.

TheraPlas Technology Platform. TheraPlas is a technology platform for the delivery of DNA and messenger RNA (“mRNA”) therapeutics via synthetic non-viral carriers and is capable of providing cell transfection for double-stranded DNA plasmids and large therapeutic RNA segments such as mRNA. There are two components of the TheraPlas™ system, a plasmid DNA or mRNA payload encoding a therapeutic protein and a delivery system. The delivery system is designed to protect the DNA/RNA from degradation and promote trafficking into cells and through intracellular compartments. We designed the delivery system of TheraPlas by chemically modifying the low molecular weight polymer to improve its gene transfer activity without increasing toxicity. We believe 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.

Technology Development and Licensing Agreements. Our current efforts and resources are applied on the development and commercialization of cancer drugs including tumor-targeting chemotherapy treatments using focused heat energy in combination with heat-activated drug delivery systems, immunotherapies and RNA-based therapies.

On August 8, 2016, we signed a Technology Transfer, Manufacturing and Commercial Supply Agreement (the “ GEN-1 Agreement”) with Zhejiang Hisun Pharmaceutical Co. Ltd. (Hisun) to pursue an expanded partnership for the technology transfer relating to the clinical and commercial manufacture and supply of GEN-1, Celsion’s proprietary gene mediated, IL-12 immunotherapy, for the greater China territory, with the option to expand into other countries in the rest of the world after all necessary regulatory approvals are obtained. The GEN-1 Agreement will help to support supply for both ongoing and planned clinical studies in the United States, and for potential future studies of GEN-1 in China. GEN-1 is currently being evaluated by Celsion in first line ovarian cancer patients.

In June 2012, Celsion and Hisun signed a long-term commercial supply agreement for the production of ThermoDox®. Hisun is one the largest manufacturers of chemotherapy agents globally, including doxorubicin. In July 2013, the ThermoDox® collaboration was expanded to focus on next generation liposomal formulation development with the goal of creating safer, more efficacious versions of marketed cancer chemotherapeutics. During 2015, Hisun successfully completed the manufacture of three registration batches for ThermoDox® and has obtained regulatory approvals to supply ThermoDox® to participating clinical trial sites in all of the countries of South East Asia, Europe and North America, as well as to the European Union countries allowing for early access to ThermoDox®. The future manufacturing of clinical and commercial supplies by Hisun will result in a cost structure allowing Celsion to profitably access all global markets, including third world countries, and help accelerate the Company’s product development program in China for ThermoDox® in primary liver cancer and other approved indications.

Business Plan

As a clinical stage biopharmaceutical company, our business and our ability to execute our strategy to achieve our corporate goals are subject to numerous risks and uncertainties. Material risks and uncertainties relating to our business and our industry are described in "Part II, Item 1A. Risk Factors" in this Quarterly Report on Form 10-Q.

Since inception, the Company has incurred substantial operating losses, principally from expenses associated with the Company’s research and development programs, clinical trials conducted in connection with the Company’s product candidates, and applications and submissions to the Food and Drug Administration (FDA). We have not generated significant revenue and have incurred significant net losses in each year since our inception. We have incurred approximately \$257 million of cumulated net losses. As of September 30, 2017, we had approximately \$2.7 million in cash and cash equivalents. On October 4, 2017, we entered into exercise agreements with certain warrant holders whereby such warrant holders would exercise 4.7 million warrants at their respective strike prices of \$2.07 and \$4.75 per share and the Company issued to these warrant holders 1.2 million new warrants at an exercise price of \$6.20 per warrant share. The exercise of these warrants, coupled with the exercise of 0.3 million additional warrant exercises provided the Company with \$17.0 million in gross proceeds. On October 27, 2017, we entered into an underwriting agreement whereby the Company sold approximately 2.6 million shares of common stock and warrants to purchase approximately 1.3 million shares of common stock for gross proceeds of \$6.6 million. We have substantial future capital requirements to continue our research and development activities and advance our product candidates through various development stages. The Company believes these expenditures are essential for the commercialization of its technologies.

The actual amount of funds the Company will need to operate is subject to many factors, some of which are beyond the Company's control. These factors include the following:

- the progress of research activities;
- the number and scope of research programs;
- the progress of preclinical and clinical development activities;
- the progress of the development efforts of parties with whom the Company has entered into research and development agreements;
- the costs associated with additional clinical trials of product candidates;
- the ability to maintain current research and development licensing arrangements and to establish new research and development and licensing arrangements;
- the ability to achieve milestones under licensing arrangements;
- the costs involved in prosecuting and enforcing patent claims and other intellectual property rights; and
- the costs and timing of regulatory approvals.

The Company has based its estimate on assumptions that may prove to be wrong. The Company may need to obtain additional funds sooner or in greater amounts than it currently anticipates. Potential sources of financing include strategic relationships, public or private sales of the Company's shares or debt and other sources. If the Company raises funds by selling additional shares of common stock or other securities convertible into common stock, the ownership interest of existing stockholders may be diluted.

With the \$2.7 million in cash and investments on hand at September 30, 2017 and combined with the gross proceeds of \$23.6 million provided by the exercise of warrants and the equity offering in October 2017, the Company believes it has sufficient capital resources to fund its operations well into the second quarter of 2019. The Company will be required to obtain additional funding in order to continue the development of its current product candidates within the anticipated time periods, if at all, and to continue to fund operations. As more fully discussed in Note 10, the Company has \$7.5 million available under a controlled equity offering facility it has with Cantor Fitzgerald & Co. Besides this equity facility, the Company does not have any committed sources of financing at this time, and there is substantial uncertainty whether additional funding will be available when needed on terms that will be acceptable to it, or at all. If the Company would not be able to obtain financing when needed, it could be unable to carry out the business plan and may have to significantly limit its operations, and its business, financial condition and results of operations could be materially harmed. With the current cash on hand and the gross proceeds of \$23.6 million from warrant exercises and the equity offering in October, 2017, management believes the Company will be able to meet its obligations as they come due.

Reverse Stock Split

On May 26, 2017, the Company effected a reverse stock split of our common stock at an exchange ratio of 14-to-1 (the "Reverse Stock Split") and set the number of authorized shares of common stock outstanding immediately after the split at 112.5 million shares. As a result of the Reverse Stock Split, every fourteen shares of common stock outstanding immediately prior to the effectiveness of the Reverse Stock Split were combined and converted into one share of common stock immediately thereafter without any change in the per share par value. The Company's common stock started to trade on the post-split basis at the commencement of trading on May 30, 2017 under a new CUSIP number 15117N503 with the same ticker symbol, CLSN. Unless otherwise expressly stated, the share and per share data in this section and elsewhere in this Quarterly Report on Form 10-Q have been adjusted to reflect the Reverse Stock Split.

Financing Overview

Equity and Debt Financings

During 2016 and thus far in 2017, the Company issued a total of 14.4 million shares of common stock in the following equity transactions for an aggregate \$46.5 million in gross proceeds.

- On February 14, 2017, the Company entered into a securities purchase agreement whereby it sold, in a public offering (the February 14, 2017 Public Offering), an aggregate of 1,384,705 shares of common stock of the Company at an offering price of \$3.22 per share. In addition, the Company sold Series AA Warrants (the Series AA Warrants) to purchase up to 1,177,790 shares of common stock and Pre-Funded Series BB Warrants (the Pre-Funded Series BB Warrants) to purchase up to 185,713 shares of common stock. The Series AA Warrants have an exercise price of \$3.22 per share, have a five year life and are immediately exercisable. The Pre-Funded Series BB Warrants were offered at \$3.08 per share, are immediately exercisable for \$0.14 per share of common stock, do not have an expiration date and were issued in lieu of shares of common stock to the extent that the purchase of common stock would cause the beneficial ownership of the purchaser of such shares, together with its affiliates and certain related parties, to exceed 9.99% of our common stock. The Company received approximately \$5.0 million in gross proceeds before the deduction of the placement agent fees and offering expenses (excluding any proceeds from the exercise of the warrants) in the February 14, 2017 Public Offering. During the first quarter of 2017, all 185,713 of the Series BB Pre-Funded warrants were exercised in full.
- The Company received gross proceeds of \$22.0 million from the exercise of warrants to purchase approximately 7.6 million shares of common stock thus far in 2017.
- On July 6, 2017, the Company entered into a securities purchase agreement with several investors, pursuant to which the Company agreed to issue and sell, in a registered direct offering, an aggregate of 2,050,000 shares of common stock of the Company at an offering price of \$2.07 per share for gross proceeds of \$4,243,500 before the deduction of the placement agent fee and offering expenses. In addition, the Company sold Pre-Funded Series CCC Warrants to purchase 385,000 shares of common stock (and the shares of common stock issuable upon exercise of the Pre-Funded Series CCC Warrants), in lieu of shares of common stock to the extent that the purchase of common stock would cause the beneficial ownership of the Purchaser, together with its affiliates and certain related parties, to exceed 9.99% of our common stock. The Pre-Funded Series CCC Warrants were sold at an offering price of \$2.06 per share for gross proceeds of \$793,100, are immediately exercisable for \$0.01 per share of common stock and do not have an expiration date. As of August 11, 2017, the Prefunded Series CCC Warrants were fully exercised. In a concurrent private placement, the Company agreed to issue to each investor, for each share of common stock and pre-funded warrant purchased in the offering, a Series AAA Warrant and Series BBB Warrant, each to purchase one share of common stock. The Series AAA Warrants are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series AAA Warrants have an exercise price of \$2.07 per share and are exercisable to purchase an aggregate of 2,435,000 shares of common stock. The Series BBB Warrants are immediately exercisable following issuance, and terminate twelve months following issuance. The Series BBB Warrants have an exercise price of \$4.75 per share and are exercisable to purchase an aggregate of 2,435,000 shares of common stock. Subject to limited exceptions, a holder of a Series AAA and Series BBB Warrant will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise.
- On October 27, 2017, the Company entered into an underwriting agreement (the “Underwriting Agreement”) with Oppenheimer & Co. Inc. (the “Underwriter”), relating to the issuance and sale (the “October 2017 Offering”) of 2,640,000 shares of common stock of the Company and warrants to purchase an aggregate of 1,320,000 shares of common stock of the Company. Each share of common stock was sold together with 0.5 warrants (the “Investor Warrants”), each whole Investor Warrant being exercisable for one share of common stock, at a offering price of \$2.50 per share and related Investor Warrants. Pursuant to the terms of the Underwriting Agreement, the Underwriter has agreed to purchase the shares and related Investor Warrants from the Company at a price of \$2.325 per share and related Investor Warrant. Each Investor Warrant is exercisable six months from the date of issuance. The Investor Warrants have an exercise price of \$3.00 per whole share, and expire five years from the date first exercisable. The Company received \$6.6 million of gross proceeds from the sale of the Shares and Investor Warrant. The October 2017 Offering closed on October 31, 2017.
- On December 23, 2016, the Company entered into a Securities Purchase Agreement with certain institutional investors, pursuant to which the Company sold, in a registered direct offering, an aggregate of 367,343 shares of common stock at an offering price of \$4.90 per share for gross proceeds of approximately \$1.8 million. In a concurrent private placement, the Company issued to the same investors warrants to purchase up to 367,343 shares of common stock at an exercise price of \$6.44 per share.
- On June 13, 2016, the Company entered into a Securities Purchase Agreement with an institutional investor, pursuant to which the Company sold, in a registered direct offering, an aggregate of 165,126 shares of common stock and Pre-funded Series B Warrants to purchase 150,000 shares of common stock for an aggregate purchase price of approximately \$6.0 million. In a concurrent private placement, the Company issued to the same investor warrants to purchase up to 630,252 shares of common stock. As of August 11, 2017, the Pre-funded Series B Warrants were fully exercised.
- We are a party to a Controlled Equity Offering SM Sales Agreement (ATM) dated as of February 1, 2013 with Cantor Fitzgerald & Co., pursuant to which we may sell additional shares of our common stock having an aggregate offering price of up to \$25 million through “at-the-market” equity offerings from time to time. From February 1, 2013 through December 31, 2015, the Company sold and issued an aggregate of 105,681 shares of common stock under the ATM, receiving approximately \$7.4 million in net proceeds. The Company did not have any sales under the ATM in 2016 and for the nine months ended September 30, 2017.

With the \$2.7 million in cash and investments on hand at September 30, 2017 and combined \$17.0 million of gross proceeds provided by the exercise of warrants in October 2017 and \$6.6 million of gross proceeds provided by the October 2017 Offering, the Company believes it has sufficient capital resources to fund its operations well into the second quarter of 2019.

However, our future capital requirements will depend upon numerous unpredictable factors, including, without limitation, the cost, timing, progress and outcomes of clinical studies and regulatory reviews of our proprietary drug candidates, our efforts to implement new collaborations, licenses and strategic transactions, general and administrative expenses, capital expenditures and other unforeseen uses of cash. To complete the development and commercialization of our products, we will need to raise substantial amounts of additional capital to fund our operations. We do not have any committed sources of financing and cannot give assurance that alternate funding will be available in a timely manner, on acceptable terms or at all. We may need to pursue dilutive equity financings, such as the issuance of shares of common stock, preferred stock, convertible debt or other convertible or exercisable securities, which financings could dilute the percentage ownership of our current common stockholders and could significantly lower the market value of our common stock.

As a clinical stage biopharmaceutical company, our business and our ability to execute our strategy to achieve our corporate goals are subject to numerous risks and uncertainties. Material risks and uncertainties relating to our business and our industry are described in "Item 1A. Risk Factors" under "Part II: Other Information" included herein.

FINANCIAL REVIEW FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2017 AND 2016

Results of Operations

For the three months ended September 30, 2017, our net loss was \$5.7 million compared to a net loss of \$6.4 million for the same period of 2016. For the nine months ended September 30, 2017, our net loss was \$15.7 million compared to a net loss of \$16.7 million for the same period of 2016. On October 4, 2017, we entered into exercise agreement with certain warrant holders whereby these warrant holders would exercise 4.7 million warrants at their respective strike prices of \$2.07 and \$4.75 per share and the Company issued to these warrant holders 1.2 million new warrants at an exercise price of \$6.20 per warrant share. On October 27, 2017, we entered into an underwriting agreement whereby the Company sold approximately 2.6 million shares of common stock and warrants to purchase approximately 1.3 million shares of common stock for gross proceeds of \$6.6 million. With the \$2.7 million in cash and investments on hand at September 30, 2017 and combined with the gross proceeds of \$23.6 million provided by the exercise of warrants and the equity offering in October 2017, the Company believes it has sufficient capital resources to fund its operations well into the second quarter of 2019.

	Three Months Ended September 30,			
	(In thousands)		Change	
	2017	2016	Increase (Decrease)	%
Licensing Revenue:	\$ 125	\$ 125	\$ —	—%
Operating Expenses:				
Clinical Research	2,951	3,826	(875)	(22.9)%
Chemistry, Manufacturing and Controls	398	399	(1)	(0.2)%
Research and development expenses	3,349	4,225	(876)	(20.7)%
General and administrative expenses	1,174	1,497	(323)	(21.6)%
Total operating expenses	4,523	5,722	(1,199)	(21.0)%
Loss from operations	\$ (4,398)	\$ (5,597)	\$ (1,199)	21.4%

	Nine Months Ended September 30,			
	(In thousands)		Change	
	2017	2016	Increase (Decrease)	%
Licensing Revenue:	\$ 375	\$ 375	\$ —	—%
Operating Expenses:				
Clinical Research	8,859	9,827	(968)	(9.9)%
Chemistry, Manufacturing and Controls	1,012	1,176	(164)	(13.9)%
Research and development expenses	9,871	11,003	(1,132)	(10.3)%
General and administrative expenses	4,291	4,888	(597)	(12.2)%
Total operating expenses	14,162	15,891	(1,729)	(10.9)%
Loss from operations	<u>\$ (13,787)</u>	<u>\$ (15,516)</u>	<u>\$ 1,729</u>	<u>11.1%</u>

Comparison of the Three Months ended September 30, 2017 and 2016

Licensing Revenue

In January 2013, we entered into a technology development contract with Hisun, pursuant to which Hisun paid us a non-refundable technology transfer fee of \$5.0 million to support our development of ThermoDox® in the China territory. The \$5.0 million received as a non-refundable payment from Hisun in the first quarter 2013 has been recorded to deferred revenue and will be amortized over the ten year term of the agreement; therefore we recorded deferred revenue of \$125,000 in each of the third quarters of 2017 and 2016.

Research and Development Expenses

Research and development (R&D) expenses decreased by \$0.9 million to \$3.3 million in the third quarter of 2017 from \$4.2 million in the same period of 2016. Costs associated with the OPTIMA Study decreased slightly by \$0.1 million to \$1.8 million in the third quarter of 2017 compared to \$1.9 million in the same period of 2016. Other clinical costs decreased by \$0.3 million to \$0.5 million in the third quarter of 2017 compared to \$0.8 million in the same period of 2016. Preclinical and regulatory costs were insignificant in the third quarter of 2017 compared to \$0.1 million in the same period of 2016. Costs associated with the production and distribution of ThermoDox® to support the OPTIMA Study remained unchanged at \$0.4 million in each of the third quarters of 2017 and 2016. R&D costs associated with GEN-1 decreased by \$0.1 million to \$0.6 million in the third quarter of 2017 compared to \$0.7 million in the same period of 2016. The Company announced the completion of enrollment of all cohorts of the OVATION Study in July 2017 and reported final clinical and translational research data in October 2017.

General and Administrative Expenses

General and administrative (G&A) expenses decreased to \$1.2 million in the third quarter of 2017 compared to \$1.5 million in the same period of 2017. This 22% decrease is attributable to a decrease of \$0.2 million in non-cash stock compensation expense and reduced professional fees of \$0.1 million in the third quarter of 2017 compared to the same period of 2016. We continue to take those steps necessary to reduce our overhead expenses.

Change in Earn-out Milestone Liability

The total aggregate purchase price for the acquisition of assets from EGEN included potential future earn-out payments contingent upon achievement of certain milestones. The difference between the aggregate \$30.4 million in future earn-out payments and the \$13.9 million included in the fair value of the acquisition consideration at June 20, 2014 was based on the Company's risk-adjusted assessment of each milestone and utilizing a discount rate based on the estimated time to achieve the milestone. These milestone payments are fair valued at the end of each quarter and any change in their value will be recognized in the condensed consolidated financial statements. As of September 30, 2017, the Company fair valued these milestones at \$12.5 million and recognized a non-cash benefit of \$1.3 million in the third quarter of 2017 as a result of the change in the fair value of these milestones from \$13.8 million at June 30, 2017. The Company recognized a non-cash charge of \$0.7 million in the third quarter of 2016 as a result of the change in the fair value of these milestones at \$14.5 million at June 30, 2016 from \$13.8 million at June 30, 2016.

Impairment of IPR&D Liability

At September 30, 2017, after our assessment of the totality of the events that could impair IPR&D, the Company determined certain IPR&D assets related to the development of its glioblastoma multiforme cancer (GBM) product candidate may be impaired. To arrive at this determination, the Company assessed the status of studies in GBM conducted by its competitors and the Company's strategic commitment of resources to its studies in primary liver cancer and ovarian cancer. The Company concluded that the GBM asset, valued at \$9.4 million, was partially impaired and wrote down the GBM asset to \$6.9 million incurring a non-cash charge of \$2.5 million in the third quarter of 2017. In connection with the writeoff of this IPR&D asset, the Company concluded there was a reduced probability of payments of the earn-out milestones associated with the GBM asset and therefore reduced the earn-out milestone liability from \$13.8 million to \$12.5 million, recording a non-cash benefit of \$1.3 million in the third quarter of 2017. The Company concluded none of the other IPR&D assets were impaired at September 30, 2017.

Investment income and interest expense

In connection with its debt facilities, the Company incurred \$0.2 million in interest expense in the three month periods ended September 30, 2016. The loan balance and end of term charges on its debt facilities were paid in full in June 2017.

Comparison of the Nine Months ended September 30, 2017 and 2016

Licensing Revenue

In January 2013, we entered into a technology development contract with Hisun, pursuant to which Hisun paid us a non-refundable technology transfer fee of \$5.0 million to support our development of ThermoDox® in the China territory. The \$5.0 million received as a non-refundable payment from Hisun in the first quarter 2013 has been recorded to deferred revenue and will be amortized over the ten year term of the agreement; therefore we recorded deferred revenue of \$375,000 in each of the first nine months of 2017 and 2016.

Research and Development Expenses

Research and development (R&D) expenses decreased by \$1.1 million to \$9.9 million in the first nine months of 2017 from \$11.0 million in the same period of 2016. Costs associated with the OPTIMA Study were \$4.9 million in the first nine of 2017 compared to \$4.4 million in the same period of 2016. This increase is largely due to higher enrollment during the first nine months of 2017 compared to the same period of 2016. Other clinical costs were \$1.9 million in the first nine months of 2017 compared to \$2.5 million in the same period of 2016, respectively. The decrease in other clinical costs is associated with the reduction of costs to support the Company's ThermoDox® studies in Europe. ThermoDox® preclinical and regulatory R&D costs were \$0.1 million in the first nine months of 2017 compared to \$0.3 million for the same period of 2016. Costs associated with the production of ThermoDox® to support the OPTIMA Study decreased to \$1.0 million in the first nine months of 2017 compared to \$1.2 million the same period of 2016. Costs associated with the research and development of GEN-1 was \$2.0 million in the first nine months of 2017 compared to \$2.3 million the same period of 2016.

General and Administrative Expenses

General and administrative expenses decreased by \$0.6 million to \$4.3 million in the first nine months of 2017 compared to \$4.9 million the same period of 2016. This 12% decrease is attributable to lower personnel related costs and professional fees in 2017. We continue to take those steps necessary to reduce our overall G&A expenses.

Change in Earn-out Milestone Liability

The total aggregate purchase price for the acquisition of assets from EGEN included potential future earn-out payments contingent upon achievement of certain milestones. The difference between the aggregate \$30.4 million in future earn-out payments and the \$13.9 million included in the fair value of the acquisition consideration at June 20, 2014 was based on the Company's risk-adjusted assessment of each milestone and utilizing a discount rate based on the estimated time to achieve the milestone. These milestone payments are fair valued at the end of each quarter and any change in their value will be recognized in the condensed consolidated financial statements. As of September 30, 2017, the Company fair valued these milestones at \$12.5 million and recognized a non-cash benefit of \$0.7 million in the first nine months of 2017 as a result of the change in the fair value of these milestones from \$13.2 million at December 31, 2016. The Company recognized a non-cash charge of \$0.6 million in the first nine of 2016 as a result of the change in the fair value of these milestones at \$14.5 million at September 30, 2016 from \$13.9 million at December 31, 2015.

Impairment of IPR&D

At September 30, 2017, after our assessment of the totality of the events that could impair IPR&D, the Company determined certain IPR&D assets related to the development of its glioblastoma multiforme cancer (GBM) product candidate may be impaired. To arrive at this determination, the Company assessed the status of studies in GBM conducted by its competitors and the Company's strategic commitment of resources to its studies in primary liver cancer and ovarian cancer. The Company concluded that the GBM asset, valued at \$9.4 million, was partially impaired and wrote down the GBM asset to \$6.9 million incurring a non-cash charge of \$2.5 million in the third quarter of 2017. In connection with the writeoff of this IPR&D asset, the Company concluded there was a reduced probability of payments of the earn-out milestones associated with the GBM asset and therefore reduced the earn-out milestone liability from \$13.8 million to \$12.5 million, recording a non-cash benefit of \$1.3 million in the third quarter of 2017. The Company concluded none of the other IPR&D assets were impaired at September 30, 2017.

Investment income and interest expense

In connection with its debt facilities the Company incurred \$0.1 million and \$0.6 million in interest expense in the nine month periods ended September 30, 2017 and 2016, respectively. The loan balance and end of term charges on its debt facilities were paid in full in June 2017.

Deemed dividend

During the nine months ended September 30, 2017, we recognized deemed dividends totaling \$0.4 million collectively in regard to multiple agreements with certain warrant holders, pursuant to which these warrant holders agreed to exercise, and the Company agreed to reprice, certain warrants. A total of warrants to purchase 790,410 shares of common stock were repriced at \$2.70 and warrants to purchase 506,627 shares of common stock were repriced at \$1.65 and the Company received \$3.0 million in gross proceeds from the sale of these repriced warrants.

Financial Condition, Liquidity and Capital Resources

Since inception we have incurred significant losses and negative cash flows from operations. We have financed our operations primarily through the net proceeds from the sales of equity, credit facilities and amounts received under our product licensing agreement with Yakult and our technology development agreement with Hisun. The process of developing and commercializing ThermoDox®, GEN-1 and other product candidates and technologies requires significant research and development work and clinical trial studies, as well as significant manufacturing and process development efforts. We expect these activities, together with our general and administrative expenses to result in significant operating losses for the foreseeable future. Our expenses have significantly and regularly exceeded our revenue, and we had an accumulated deficit of \$257 million at September 30, 2017.

At September 30, 2017, we had total current assets of \$2.8 million (including cash and cash equivalents of \$2.7 million) and current liabilities of \$6.0 million, resulting in net working capital deficit of \$3.2 million. At December 31, 2016, we had total current assets of \$4.5 million (including cash, cash equivalents and short term investments and related interest receivable on short-term investments of \$4.3 million) and current liabilities of \$8.4 million, resulting in net working capital deficit of \$3.9 million. On October 4, 2017, we entered into exercise agreements with certain warrant holders whereby these warrant holders would exercise 4.7 million warrants at their respective strike prices of \$2.07 and \$4.75 per share and the Company issued to these warrant holders 1.2 million new warrants at an exercise price of \$6.20 per warrant share. The exercise of these warrants, coupled with the exercise of 0.3 million additional warrant exercises provided the Company with \$17.0 million in gross proceeds. On October 27, 2017, we entered into an underwriting agreement whereby the Company sold approximately 2.6 million shares of common stock and warrants to purchase approximately 1.3 million shares of common stock for gross proceeds of \$6.6 million. With the \$2.7 million in cash and investments on hand at September 30, 2017 and combined with the gross proceeds of \$23.6 million provided by the exercise of warrants and the equity offering in October 2017, the Company believes it has sufficient capital resources to fund its operations well into the second quarter of 2019.

We have substantial future capital requirements to continue our research and development activities and advance our product candidates through various development stages. The Company believes these expenditures are essential for the commercialization of its technologies.

Net cash used in operating activities for the first nine months of 2017 was \$12.4 million. Our 2017 net loss of \$15.7 million for the nine month period ended September 30, 2017 included (i) \$1.0 million in non-cash stock-based compensation expense, (ii) a non-cash charge of \$2.5 million in the impairment of one of its IPR&D product candidates and (iii) \$0.7 million in a non-cash benefit based on the change in the earn-out milestone liability. The \$12.4 million net cash used in operating activities was mostly funded from cash and cash equivalents.

Net cash provided by financing activities was \$10.7 million during the nine month period ended September 30, 2017 which resulted from net proceeds of \$13.3 million from the sale of our common stock and exercise of warrants in the first nine months of 2017 partially offset by principal payments and end of term charges of \$2.6 million on the Hercules Credit Agreement.

On February 14, 2017, the Company entered into a securities purchase agreement whereby it sold, in a public offering, an aggregate of 1,384,705 shares of common stock, Series AA Warrants to purchase up to 1,177,814 shares of common stock and Pre-Funded Series BB Warrants to purchase up to 185,713 shares of common stock for an aggregate of approximately \$5.0 million in gross proceeds. During the first quarter of 2017, all 185,713 of the Series BB Pre-Funded warrants were exercised in full. The Company received gross proceeds of \$2.1 million from the exercise of Series AA Warrants to purchase 638,809 shares of common stock during the first nine months of 2017.

During June 2017, the Company entered into multiple agreements with certain warrant holders, pursuant to which these warrant holders agreed to exercise, and the Company agreed to reprice, certain warrants. A total of warrants to purchase 790,410 shares of common stock were repriced at \$2.70 and warrants to purchase 506,627 shares of common stock were repriced at \$1.65 and the Company received \$3.0 million in gross proceeds from the sale of these repriced warrants.

On July 6, 2017, the Company entered into a securities purchase agreement with several investors, pursuant to which the Company agreed to issue and sell, in a registered direct offering, an aggregate of 2,050,000 shares of common stock of the Company at an offering price of \$2.07 per share for gross proceeds of \$4,243,500 before the deduction of the placement agent fee and offering expenses. In addition, the Company sold Pre-Funded Series CCC Warrants to purchase 385,000 shares of common stock (and the shares of common stock issuable upon exercise of the Pre-Funded Series CCC Warrants), in lieu of shares of common stock to the extent that the purchase of common stock would cause the beneficial ownership of the Purchaser, together with its affiliates and certain related parties, to exceed 9.99% of our common stock. The Pre-Funded Series CCC Warrants were sold at an offering price of \$2.06 per share for gross proceeds of \$793,100, are immediately exercisable for \$0.01 per share of common stock and do not have an expiration date. In a concurrent private placement, the Company agreed to issue to each investor, for each share of common stock and pre-funded warrant purchased in the offering, a Series AAA Warrant and Series BBB Warrant, each to purchase one share of common stock. The Series AAA Warrants are initially exercisable six months following issuance, and terminate five and one-half years following issuance. The Series AAA Warrants have an exercise price of \$2.07 per share and are exercisable to purchase an aggregate of 2,435,000 shares of common stock. The Series BBB Warrants are immediately exercisable following issuance, and terminate twelve months following issuance. The Series BBB Warrants have an exercise price of \$4.75 per share and are exercisable to purchase an aggregate of 2,435,000 shares of common stock. Subject to limited exceptions, a holder of a Series AAA and Series BBB Warrant will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise

On October 27, 2017, the Company entered into an underwriting agreement (the "Underwriting Agreement") with Oppenheimer & Co. Inc. (the "Underwriter"), relating to the issuance and sale (the "October 2017 Offering") of 2,640,000 shares of common stock of the Company and warrants to purchase an aggregate of 1,320,000 shares of common stock of the Company. Each share of common stock was sold together with 0.5 warrants (the "Investor Warrants"), each whole Investor Warrant being exercisable for one share of common stock, at a offering price of \$2.50 per share and related Investor Warrants. Pursuant to the terms of the Underwriting Agreement, the Underwriter has agreed to purchase the shares and related Investor Warrants from the Company at a price of \$2.325 per share and related Investor Warrant. Each Investor Warrant is exercisable six months from the date of issuance. The Investor Warrants have an exercise price of \$3.00 per whole share, and expire five years from the date first exercisable. The Company received \$6.6 million of gross proceeds from the sale of the Shares and Investor Warrant. The October 2017 Offering closed on October 31, 2017.

In February 2013, we entered into a Controlled Equity Offering SM Sales Agreement (ATM) with Cantor Fitzgerald & Co., as sales agent (Cantor), pursuant to which we may offer and sell, from time to time, through Cantor, shares of our common stock having an aggregate offering price of up to \$25.0 million (the ATM Shares) pursuant to our previously filed and effective Registration Statement on Form S-3. Under the ATM Agreement, Cantor may sell ATM Shares by any method deemed to be an "at-the-market" offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including sales made directly on The NASDAQ Capital Market, on any other existing trading market for the our common stock or to or through a market maker. We will pay Cantor a commission of three percent of the aggregate gross proceeds from each sale of ATM Shares. We have sold and issued an aggregate of 105,681 shares under the ATM Agreement through September 30, 2017, receiving approximately \$7.4 million in net proceeds.

We may seek additional capital through further public or private equity offerings, debt financing, additional strategic alliance and licensing arrangements, collaborative arrangements, or some combination of these financing alternatives. If we raise additional funds through the issuance of equity securities, the percentage ownership of our stockholders could be significantly diluted and the newly issued equity securities may have rights, preferences, or privileges senior to those of the holders of our common stock. If we raise funds through the issuance of debt securities, those securities may have rights, preferences, and privileges senior to those of our common stock. If we seek strategic alliances, licenses, or other alternative arrangements, such as arrangements with collaborative partners or others, we may need to relinquish rights to certain of our existing or future technologies, product candidates, or products we would otherwise seek to develop or commercialize on our own, or to license the rights to our technologies, product candidates, or products on terms that are not favorable to us. The overall status of the economic climate could also result in the terms of any equity offering, debt financing, or alliance, license, or other arrangement being even less favorable to us and our stockholders than if the overall economic climate were stronger. We also will continue to look for government sponsored research collaborations and grants to help offset future anticipated losses from operations and, to a lesser extent, interest income.

If adequate funds are not available through either the capital markets, strategic alliances, or collaborators, we may be required to delay or, reduce the scope of, or terminate our research, development, clinical programs, manufacturing, or commercialization efforts, or effect additional changes to our facilities or personnel, or obtain funds through other arrangements that may require us to relinquish some of our assets or rights to certain of our existing or future technologies, product candidates, or products on terms not favorable to us.

Off-Balance Sheet Arrangements and Contractual Obligations

We have no off-balance sheet financing arrangements. In April 2017, the Company and its landlord amended the lease for the corporate offices located in Lawrenceville NJ effective May 1, 2017. The lease amendment extends the term of the lease for an additional 64 months, reduced the premises to 7,565 square feet, reduced the monthly rent and provided four months free rent. The monthly rent will range from approximately \$18,900 in the first year to approximately \$20,500 in the final year of the amendment. The Company also has a one-time option to cancel the lease as of the 24th month after the commencement date of the Lease amendment. Other than this lease amendment, there were no material changes during the three months ended September 30, 2017 to our operating leases, which are disclosed in the contractual commitments table in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed on March 24, 2017 with the Securities and Exchange Commission.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

The primary objective of our investment activities is to preserve our capital until it is required to fund operations while at the same time maximizing the income we receive from our investments without significantly increasing risk. Our cash flow and earnings are subject to fluctuations due to changes in interest rates in our investment portfolio. We maintain a portfolio of various issuers, types, and maturities. These securities are classified as available-for-sale and, consequently, are recorded on the condensed consolidated balance sheet at fair value with unrealized gains or losses reported as a component of accumulated other comprehensive loss included in stockholders' equity.

Item 4. CONTROLS AND PROCEDURES

We have carried out an evaluation, under the supervision and with the participation of management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as that term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended. Based on that evaluation, our principal executive officer and principal financial officer have concluded that, as of September 30, 2017, which is the end of the period covered by this report, our disclosure controls and procedures are effective at the reasonable assurance level in alerting them in a timely manner to material information required to be included in our periodic reports with the Securities and Exchange Commission.

There were no changes in our internal controls over financial reporting identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 of the Securities Exchange Act of 1934, as amended, that occurred during the nine months ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Our management, including our chief executive officer and chief financial officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II: OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

The following is a summary of the risk factors, uncertainties and assumptions that we believe are most relevant to our business. These are factors that, individually or in the aggregate, we think could cause our actual results to differ significantly from expected or historical results and our forward-looking statements. We note these factors for investors as permitted by Section 21E of the Securities Exchange Act of 1934, as amended and Section 27A of the Securities Act of 1933, as amended. Additional risks that we currently believe are immaterial may also impair our business operations. Investors should carefully consider the risks described below before making an investment decision, and understand that it is not possible to predict or identify all such factors. Consequently, investors should not consider the following to be a complete discussion of all potential risks or uncertainties that may impact our business. Moreover, we operate in a competitive and rapidly changing environment. New factors emerge from time to time and it is not possible to predict the impact of all of these factors on our business, financial condition or results of operations. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise. The description provided in this Item 1A includes any material changes to and supersedes the description of the risk factors associated with our business previously disclosed in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed on March 24, 2017 with the Securities and Exchange Commission (SEC). In assessing these risks, investors should also refer to the other information contained or incorporated by reference in this Quarterly Report and our other filings made from time to time with the SEC.

RISKS RELATED TO OUR BUSINESS

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

Since our inception, our expenses have substantially exceeded our revenue, resulting in continuing losses and an accumulated deficit of \$257 million at September 30, 2017. For the years ended December 31, 2014, 2015 and 2016 and the nine months ended September 30, 2017, we incurred a net loss of \$25.5 million, \$22.5 million, \$22.1 million and \$15.7 million, respectively. We currently have no product revenue and do not expect to generate any product revenue for the foreseeable future other than through the sale of our proprietary reagent products for life science research, which products are based on our newly acquired proprietary delivery platform technologies, TheraPlas and TheraSilence. Because we are committed to continuing our product research, development, clinical trial and commercialization programs, we will continue to incur significant operating losses unless and until we complete the development of ThermoDox®, GEN-1 and other new product candidates and these product candidates have been clinically tested, approved by the U.S. Food and Drug Administration (FDA) and successfully marketed. The amount of future losses is uncertain. Our ability to achieve profitability, if ever, will depend on, among other things, us or our collaborators successfully developing product candidates, obtaining regulatory approvals to market and commercialize product candidates, manufacturing any approved products on commercially reasonable terms, establishing a sales and marketing organization or suitable third party alternatives for any approved product and raising sufficient funds to finance business activities. If we or our collaborators are unable to develop and commercialize one or more of our product candidates or if sales revenue from any product candidate that receives approval is insufficient, we will not achieve profitability, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

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

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

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

We have not generated significant revenue and have incurred significant net losses in each year since our inception. Since our inception, our expenses have substantially exceeded our revenue, resulting in continuing losses and an accumulated deficit of \$257 million at September 30, 2017. For the years ended December 31, 2014, 2015 and 2016 and the nine months ended September 30, 2017, we incurred a net loss of \$25.5 million, \$22.5 million, \$22.1 million and \$15.7 million, respectively. As of September 30, 2017, we had approximately \$2.7 million in cash and cash equivalents. On October 4, 2017, we entered into exercise agreements with certain warrant holders whereby these warrant holders would exercise 4.7 million warrants at their respective strike prices of \$2.07 and \$4.75 per share and the Company issued to these warrant holders 1.2 million new warrants at an exercise price of \$6.20 per warrant share. The exercise of these warrants, coupled with the exercise of 0.3 million additional warrants in October 2017 provided the Company with \$17.0 million in gross proceeds. As of September 30, 2017, we had \$2.7 million in cash. On October 27, 2017, we entered into an underwriting agreement whereby the Company sold approximately 2.6 million shares of common stock and warrants to purchase approximately 1.3 million shares of common stock for gross proceeds of \$6.6 million. With the \$2.7 million in cash and investments on hand at September 30, 2017 and combined with the gross proceeds of \$23.6 million provided by the exercise of warrants and the equity offering in October 2017, the Company believes it has sufficient capital resources to fund its operations well into the second quarter of 2019.

We have substantial future capital requirements to continue our research and development activities and advance our product candidates through various development stages. For example, ThermoDox® is being evaluated in a Phase III clinical trial in combination with RFA for the treatment of primary liver cancer and other preclinical studies. We completed a Phase I dose-escalation clinical trial of GEN-1 in combination with the standard of care in neo-adjuvant ovarian cancer in the third quarter of 2017 and plan to expand our clinical development program for GEN-1 in ovarian cancer in 2018.

To complete the development and commercialization of our product candidates, we will need to raise substantial amounts of additional capital to fund our operations. Our future capital requirements will depend upon numerous unpredictable factors, including, without limitation, the cost, timing, progress and outcomes of clinical studies and regulatory reviews of our proprietary drug candidates, our efforts to implement new collaborations, licenses and strategic transactions, general and administrative expenses, capital expenditures and other unforeseen uses of cash. We do not have any committed sources of financing and cannot assure you that alternate funding will be available in a timely manner, on acceptable terms or at all. We may need to pursue dilutive equity financings, such as the issuance of shares of common stock, convertible debt or other convertible or exercisable securities. Such dilutive equity financings could dilute the percentage ownership of our current common stockholders and could significantly lower the market value of our common stock. In addition, a financing could result in the issuance of new securities that may have rights, preferences or privileges senior to those of our existing stockholders.

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

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

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

New gene-based products for therapeutic applications are subject to extensive regulation by the FDA and comparable agencies in other countries. The precise regulatory requirements with which we will have to comply, now and in the future, are uncertain due to the novelty of the gene-based products we are developing.

Limited data exist regarding the safety and efficacy of DNA-based therapeutics compared with conventional therapeutics, and government regulation of DNA-based therapeutics is evolving. Adverse events or the perception of adverse events in the field of gene therapy generally, or with respect to our product candidates specifically, may have a particularly negative impact on public perception of gene therapy and result in greater governmental regulation, including future bans or stricter standards imposed on gene-based therapy clinical trials, stricter labeling requirements and other regulatory delays in the testing or approval of our potential products. Any increased scrutiny could delay or increase the costs of our product development efforts or clinical trials.

Even if our products receive regulatory approval, they may still face future development and regulatory difficulties. Government regulators may impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies. This governmental oversight may be particularly strict with respect to gene-based therapies.

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

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

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

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

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

- the failure of markets for the products of acquired businesses, technologies or product lines to develop as expected;
- uncertainties in identifying and pursuing acquisition targets;
- the challenges in achieving strategic objectives, cost savings and other benefits expected from acquisitions;
- the risk that the financial returns on acquisitions will not support the expenditures incurred to acquire such businesses or the capital expenditures needed to develop such businesses;
- difficulties in assimilating the acquired businesses, technologies or product lines;
- the failure to successfully manage additional business locations, including the additional infrastructure and resources necessary to support and integrate such locations;
- the existence of unknown product defects related to acquired businesses, technologies or product lines that may not be identified due to the inherent limitations involved in the due diligence process of an acquisition;
- the diversion of management's attention from other business concerns;
- risks associated with entering markets or conducting operations with which we have no or limited direct prior experience;
- risks associated with assuming the legal obligations of acquired businesses, technologies or product lines;
- risks related to the effect that internal control processes of acquired businesses might have on our financial reporting and management's report on our internal control over financial reporting;
- the potential loss of key employees related to acquired businesses, technologies or product lines; and
- the incurrence of significant exit charges if products or technologies acquired in business combinations are unsuccessful.

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

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

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

Further, we cannot guarantee that any patent or other technology rights licensed to us by others will not be challenged or circumvented successfully by third parties, or that the rights granted will provide adequate protection. We may be required to alter any of our potential products or processes, or enter into a license and pay licensing fees to a third party or cease certain activities. There can be no assurance that we can obtain a license to any technology that we determine we need on reasonable terms, if at all, or that we could develop or otherwise obtain alternate technology. If a license is not available on commercially reasonable terms or at all, our business, results of operations, and financial condition could be significantly harmed and we may be prevented from developing and commercializing the product. Litigation, which could result in substantial costs, may also be necessary to enforce any patents issued to or licensed by us or to determine the scope and validity of others' claimed proprietary rights.

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

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

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

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

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

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

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

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

We can also be prevented from selling or commercializing any of our products that use the infringing technology in the future, unless we obtain a license from such third party. A license may not be available from such third party on commercially reasonable terms, or may not be available at all. Any modification to include a non-infringing technology may not be possible or if possible may be difficult or time-consuming to develop, and require revalidation, which could delay our ability to commercialize our products. Any infringement action asserted against us, even if we are ultimately successful in defending against such action, would likely delay the regulatory approval process of our products, harm our competitive position, be expensive and require the time and attention of our key management and technical personnel.

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

We do not independently conduct clinical trials for our drug candidates. We rely, and expect to continue to rely, on third-party clinical investigators, clinical research organizations (CROs), clinical data management organizations and consultants to design, conduct, supervise and monitor our clinical trials.

Because we do not conduct our own clinical trials, we must rely on the efforts of others and have reduced control over aspects of these activities, including, the timing of such trials, the costs associated with such trials and the procedures that are followed for such trials. We do not expect to significantly increase our personnel in the foreseeable future and may continue to rely on third parties to conduct all of our future clinical trials. If we cannot contract with acceptable third parties on commercially reasonable terms or at all, if these third parties are unable to carry out their contractual duties or obligations in a manner that is consistent with our expectations or meet expected deadlines, if they do not carry out the trials in accordance with budgeted amounts, if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols or for other reasons, or if they fail to maintain compliance with applicable government regulations and standards, our clinical trials may be extended, delayed or terminated or may become significantly more expensive, we may not receive development milestone payments when expected or at all, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Our success depends significantly on the continued contributions of our executive officers, scientific and technical personnel and consultants, including those retained in the EGEN acquisition, and on our ability to attract additional personnel as we seek to implement our business strategy and develop our product candidates and businesses. Our operations associated with the EGEN acquisition are located in Huntsville, Alabama. Key employees may depart if we fail to successfully manage this additional business location or in relation to any uncertainties or difficulties of integration with Celis. We cannot guarantee that we will retain key employees to the same extent that we and EGEN retained each of our own employees in the past, which could have a negative impact on our business, results of operations and financial condition. Our integration of EGEN and ability to operate in the fields we acquired from EGEN may be more difficult if we lose key employees. Additionally, during our operating history, we have assigned many essential responsibilities to a relatively small number of individuals. However, as our business and the demands on our key employees expand, we have been, and will continue to be, required to recruit additional qualified employees. The competition for such qualified personnel is intense, and the loss of services of certain key personnel or our inability to attract additional personnel to fill critical positions could adversely affect our business. Further, we do not carry "key man" insurance on any of our personnel. Therefore, loss of the services of key personnel would not be ameliorated by the receipt of the proceeds from such insurance.

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

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

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

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

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

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

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

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

RISKS RELATED TO OUR SECURITIES

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

The trading price for our common stock has been, and we expect it to continue to be, volatile. Our January 31, 2013 announcement that the HEAT Study failed to meet its primary endpoint has resulted in significant volatility and a steep decline in the price of our common stock, a level of decline that could result in securities litigation. Plaintiffs' securities litigation firms have publicly announced that they are investigating potential securities fraud claims that they may wish to make against us. The price at which our common stock trades depends upon a number of factors, including our historical and anticipated operating results, our financial situation, announcements of technological innovations or new products by us or our competitors, our ability or inability to raise the additional capital we may need and the terms on which we raise it, and general market and economic conditions. Some of these factors are beyond our control. Broad market fluctuations may lower the market price of our common stock and affect the volume of trading in our stock, regardless of our financial condition, results of operations, business or prospect. After giving retroactive effect of the reverse stock split, the closing price of our common stock as reported on The NASDAQ Capital Market had a high price of \$27.03 and a low price of \$4.90 in the 52-week period ended December 31, 2016 and a high price of \$7.14 and a low price of \$1.51 from January 3, 2017 through November 13, 2017. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this "Risk Factors" section and other factors, including:

- results of preclinical and clinical studies of our product candidates or those of our competitors;
- regulatory or legal developments in the U.S. and other countries, especially changes in laws and regulations applicable to our product candidates;
- actions taken by regulatory agencies with respect to our product candidates, clinical studies, manufacturing process or sales and marketing terms;
- introductions and announcements of new products by us or our competitors, and the timing of these introductions or announcements;

- announcements by us or our competitors of significant acquisitions or other strategic transactions or capital commitments;
- fluctuations in our quarterly operating results or the operating results of our competitors;
- variance in our financial performance from the expectations of investors;
- changes in the estimation of the future size and growth rate of our markets;
- changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;
- failure of our products to achieve or maintain market acceptance or commercial success;
- conditions and trends in the markets we serve;
- changes in general economic, industry and market conditions;
- success of competitive products and services;
- changes in market valuations or earnings of our competitors;
- changes in our pricing policies or the pricing policies of our competitors;
- changes in legislation or regulatory policies, practices or actions;
- the commencement or outcome of litigation involving our company, our general industry or both;
- recruitment or departure of key personnel;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- actual or anticipated changes in earnings estimates or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;
- actual or expected sales of our common stock by our stockholders;
- acquisitions and financings, including the EGEN acquisition; and
- the trading volume of our common stock.

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

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

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. As of November 13, 2017, we had 16,062,341 shares of common stock outstanding, all of which shares, other than shares held by our directors and certain officers, were eligible for sale in the public market, subject in some cases to compliance with the requirements of Rule 144, including the volume limitations and manner of sale requirements. In addition, all of the shares of common stock issuable upon exercise of warrants will be freely tradable without restriction or further registration upon issuance.

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

In order to raise additional capital or pursue strategic transactions, we may in the future offer, issue or sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock, including the issuance of common stock in relation to the achievement, if any, of milestones triggering our payment of earn-out consideration in connection with the EGEN acquisition. Our stockholders may experience significant dilution as a result of future equity offerings or issuances. Investors purchasing shares or other securities in the future could have rights superior to existing stockholders. As of November 13, 2017, we have a significant number of securities convertible into, or allowing the purchase of, our common stock, including 3,102,439 shares of common stock issuable upon exercise of warrants outstanding, 679,752 options to purchase shares of our common stock and restricted stock awards outstanding, and 29,498 shares of common stock reserved for future issuance under our stock incentive plans. Under the Controlled Equity Offering SM Sales Agreement entered into with Cantor Fitzgerald & Co. on February 1, 2013, we may offer and sell, from time to time through “at-the-market” offerings, up to an aggregate of \$25 million of shares of our common stock. We had only sold \$7.6 million under the Sales Agreement as of September 30, 2017.

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

Our common stock is currently listed on The NASDAQ Capital Market. To maintain the listing of our common stock on The NASDAQ Capital Market, we are required to meet certain listing requirements, including, among others, either: (i) a minimum closing bid price of \$1.00 per share, a market value of publicly held shares (excluding shares held by our executive officers, directors and 10% or more stockholders) of at least \$1 million and stockholders' equity of at least \$2.5 million; or (ii) a minimum closing bid price of \$1.00 per share, a market value of publicly held shares (excluding shares held by our executive officers, directors and 10% or more stockholders) of at least \$1 million and a total market value of listed securities of at least \$35 million. As of November 13, 2017, the closing sale price per share of our common stock was \$2.12, the total market value of our publicly held shares of our common stock (excluding shares held by our executive officers, directors and 10% or more stockholders) was approximately \$34.0 million and the total market value of our listed securities was approximately \$34.1 million. There is no assurance that we will continue to meet the minimum closing price requirement and other listing requirements. As of September 30, 2017, we had stockholders' equity of approximately \$5.3 million.

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

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

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

We currently have significant net operating losses (NOLs) that may be used to offset future taxable income. In general, under Section 382 of the Internal Revenue Code of 1986, as amended (the Code), a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. During 2016, 2015, 2014 and years prior, we performed analyses to determine if there were changes in ownership, as defined by Section 382 of the Internal Revenue Code that would limit our ability to utilize certain net operating loss and tax credit carry forwards. We determined we experienced an ownership change, as defined by Section 382 of the Code, in connection with certain common stock offerings in 2011, 2013, and 2015. As a result, the utilization of our federal tax net operating loss carry forwards generated prior to the ownership changes is limited. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Code, which would significantly limit our ability to utilize NOLs to offset future taxable income.

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

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

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

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

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

- 4.1+ Form of Series DDD Common Stock Purchase Warrant
- 4.2 Series EEE Common Stock Purchase Warrant, incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of the Company filed with the SEC on October 31, 2017.
- 4.3 Representative's Common Stock Purchase Warrant, incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K of the Company filed with the SEC on October 31, 2017.
- 10.1+ Amendment to Lease Agreement dated April 20, 2017, by and between Celsion Corporation and Lenox Drive Office Park, LLC
- 10.2 Securities Purchase Agreement dated July 6, 2017, by and among the Company and the Purchaser named therein, incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company filed with the SEC on July 11, 2017.
- 10.3+ Form of Letter Agreement, dated October 4, 2017, by and between the Company and certain investors.
- 31.1+ Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2+ Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1* Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- + Filed herewith.
- 101** The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the unaudited Consolidated Balance Sheets, (ii) the unaudited Consolidated Statements of Operations, (iii) the unaudited Consolidated Statements of Comprehensive Loss, (iv) the unaudited Consolidated Statements of Cash Flows, (v) the unaudited Consolidated Statements of Change in Stockholders' Equity (Deficit), and (vi) Notes to Consolidated Financial Statements.
 - * Exhibit 32.1 is being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall such exhibit be deemed to be incorporated by reference in any registration statement or other document filed under the Securities Act of 1933, as amended, or the Securities Exchange Act, except as otherwise stated in such filing.
 - ** XBRL information is filed herewith.

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 thereunto duly authorized.

November 14, 2017

CELSION CORPORATION

Registrant

By: /s/ Jeffrey W. Church

Jeffrey W. Church
Senior Vice President and Chief Financial Officer

By: /s/ Michael H. Tardugno

Michael H. Tardugno
Chairman, President and Chief Executive Officer

EXHIBIT INDEX

Item 6. Exhibits.

- 4.1+ [Form of Series DDD Common Stock Purchase Warrant](#)
- 4.2 [Series EEE Common Stock Purchase Warrant, incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of the Company filed with the SEC on October 31, 2017.](#)
- 4.3 [Representative's Common Stock Purchase Warrant, incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K of the Company filed with the SEC on October 31, 2017.](#)
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 - ** XBRL information is filed herewith.

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

**SERIES DDD COMMON STOCK PURCHASE WARRANT
CELSION CORPORATION**

Warrant Shares: []

Issue Date: October 4, 2017

Initial Exercise Date: October 4, 2018

THIS SERIES DDD COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, [] or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after October 4, 2018 (the "Initial Exercise Date") and on or prior to the close of business on April 4, 2019 (the "Termination Date"), provided, however, that if such date is not a Trading Day, the Termination Date shall be the immediately following Trading Day) but not thereafter, to subscribe for and purchase from Celsion Corporation, a Delaware corporation (the "Company"), up to [] shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated July 6, 2017, among the Company and the purchasers signatory thereto.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company or the Transfer Agent (or such other office or agency that the Company may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company), as applicable, of a duly executed facsimile copy or PDF copy submitted by electronic (or e-mail attachment) of the Notice of Exercise in the form annexed hereto. Within the earlier of (i) three (3) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$6.20, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. If at any time after the twelve-month anniversary of the Issue Date, there is no effective registration statement registering, or no current prospectus available for, the resale of the Warrant Shares by the Holder, then this Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

- (A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b)(64) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. as of the time of the Holder’s execution of the applicable Notice of Exercise if such Notice of Exercise is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of “regular trading hours” on such Trading Day;
- (B) = the Exercise Price of this Warrant, as adjusted hereunder; and
- (X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the characteristics of the Warrants being exercised, and the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

“Bid Price” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earlier of (i) one (1) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) three Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be [4.99%/9.99%] of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged, subject to the limitation on fractional shares in Section 2(d)(v). Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Voluntary Adjustment By Company. The Company may at any time during the term of this Warrant reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the Board of Directors of the Company.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (other than dividends or distributions subject to Section 3(a) herein) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof and to the provisions of Section 4.1 of the Purchase Agreement, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Issue Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant, as the case may be, comply with the provisions of Section 5.7 of the Purchase Agreement.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3(c) and Section 3(d).

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Purchase Agreement.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered and the Holder does not utilize cashless exercise following the twelve month anniversary of the Issue Date, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies, notwithstanding the fact that all rights hereunder terminate on the Termination Date. If the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the notice provisions of the Purchase Agreement.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

CELSION CORPORATION

By: _____

Name: _____

Title: _____

NOTICE OF EXERCISE

TO: CELSION CORPORATION

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States; or

if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

The Warrant Shares shall be delivered to the following DWAC Account Number:

(4) Accredited Investor. The undersigned is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing

Entity: _____

Signature of Authorized Signatory of Investing Entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Date: _____

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)
FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____

Phone Number: _____
(Please Print)

Email Address: _____

Dated: _____, _____

Holder's
Signature: _____

Holder's
Address: _____

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (“**First Amendment**”) dated April 20, 2017 between **LENOX DRIVE OFFICE PARK, LLC**, a Delaware limited liability company with an office at c/o JFR Global, 2329 Nostrand Avenue, Suite 200, Brooklyn, New York 11210, successor in interest to Brandywine Operating Partnership, L.P. (“**Landlord**”) and **CELSION CORPORATION**, a Delaware Corporation limited liability company having an address at 997 Lenox Drive, Suite 102, Lawrenceville, New Jersey 08648 (“**Tenant**”).

RECITALS:

WHEREAS, pursuant to a certain Lease dated July 14, 2011 (the “**Original Lease**”), Tenant now leases an agreed upon 10,870 rentable square feet (“**rsf**”) of space on the first floor of the office building located at 997 Lenox Drive, Lawrenceville, New Jersey (the “**Building**”), commonly referred to as Suite 106 (the “**Original Premises**”); and

WHEREAS, the term for the Original Lease expires on April 30, 2017; and

WHEREAS, Tenant now desires to reduce the size of the Original Premises such that it will be comprised of an agreed upon 7,565 rsf (the “**Demised Premises**”) and further desires to extend the term of the Lease for an additional five (5) years and four (4) months, subject to the terms and conditions described herein; and

WHEREAS, Landlord and Tenant mutually agree in this First Amendment to implement the terms of the reduction in size and extension of term and make such other modifications as are herein agreed in order to accomplish and complement the foregoing, all as set forth herein below.

NOW, THEREFORE, in consideration of the premises and mutual covenants hereinafter contained, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Incorporation of Recitals; Capitalized Terms.** The recitals set forth above, the Original Lease as amended herein, and the exhibits attached thereto are hereby incorporated by reference into this First Amendment. For sake of clarity any reference to the Building, Premises, Term, and Landlord shall mean references to those terms identified in this First Amendment. For purposes of this First Amendment, except where the context otherwise requires, the First Amendment and the Original Lease shall be referred to collectively as the “**Lease**.”

2. **Demised Premises.** Landlord and Tenant agree that effective May 1, 2017 the Demised Premises shall be deemed to be comprised of 7,565 rsf. The Demised Premises and that portion of the Original Premises being removed are depicted on Schedule A attached hereto and made a part hereof. Landlord agrees that the current IT room, which is not contiguous to the premises shall continue to be included in the Demised Premises. Tenant agrees to pay a sum not to exceed \$1,500.00 based on Landlord's invoice toward the creation of a hallway door access. Landlord shall have the absolute right upon ninety (90) days' notice to relocate the IT room into the Demised Premises at Tenant's sole cost and expense. If Landlord relocates the IT room, Landlord shall reimburse the Tenant by way of immediately applied rent credit, the sum of \$1,500.00. Upon the completion of the relocation Landlord and Tenant will readjust the square footage and amount of Fixed Basic Rent from the Demised Premises after the relocation. Landlord further agrees that if the hallway door access can be utilized for a new tenant, it shall credit Tenant toward the next payment of Fixed Basic Rent the amount paid by Tenant for the hallway access door.

3. **Lease Term.** Landlord and Tenant agree that the term of the Lease shall be extended for five (5) years and four (4) months. The Commencement Date shall be May 1, 2017 regardless of whether Landlord has completed Landlord's Work as described in Paragraph 6 and the Expiration Date shall be August 30, 2022. The foregoing agreed upon Commencement Date for this First Amendment shall require Tenant to vacate, and discontinue use of, that portion of the Premises leased under the Original Lease (comprised of 3,305 rsf as described on Schedule A) by no later than May 1, 2017 and to execute and deliver to Landlord this First Amendment by no later than 5:00 PM April 12, 2017. The parties agree to execute a Confirmation of Lease Term document to be prepared by Landlord consistent with the form attached to the Original Lease as Exhibit B. The parties agree that the Original Lease shall continue in accordance with its terms until the Commencement Date described herein.

4. **Fixed Basic Rent.** During the Lease Term for the Demised Premises, the Fixed Basic Rent payable pursuant to the Lease, as further amended by this First Amendment, shall be based on consecutive 12 month periods falling on the anniversary of the Commencement Date, and each such 12-month period shall be a "Lease Year." The first Lease Year shall commence on the Commencement Date as described above. There shall be an abatement of Fixed Basic Rent during the initial four (4) months of the term. During the rent abatement period, Tenant shall pay electric charges in the manner currently calculated as applied to the Demised Premises. Fixed Basic Rent shall be payable based on 7,565 rsf as set forth in the table below:

<u>Lease Year</u>	<u>Per RSF</u>	<u>Annual Rent</u>	<u>Monthly Rate</u>
1	\$ 30.00	\$ 151,300.00*	\$ 18,912.50
2	\$ 30.50	\$ 230,732.50	\$ 19,227.71
3	\$ 31.00	\$ 234,515.00	\$ 19,542.92
4	\$ 31.50	\$ 238,297.50	\$ 19,858.13
5	\$ 32.00	\$ 242,080.00	\$ 20,173.33
6	\$ 32.50	\$ 81,954.16**	\$ 20,488.54

*Based on 8 months following 4 month rent abatement
 ** Based on 4 months

5 . **Additional Rent/Utilities/Base Year/ Tenant's Percentage.** Tenant shall continue to pay Additional Rent, Operating Expenses, and Utilities in the same manner as presently paid pursuant to the Original Lease except as set forth herein which shall be applicable after the Commencement Date. Electricity shall be charged at the rate of the greater of \$1.75 per rentable square foot or the adjusted rate as described in Section 5 of the Lease. Tenant's Percentage as described in Section 4 (A) of the Original Lease shall be 7.6%. Landlord further agrees that effective May 1, 2017, Tenant's Base Year shall be Calendar Year 2017.

6 . **Acceptance of Premises/ Additional Work.** Tenant agrees that the Premises are accepted in its AS –IS subject to Landlord implement the changes depicted on the Space Plan attached hereto as Schedule A and in accordance with the scope of work attached hereto as Schedule B. All work shall be performed by Landlord and shall use the then applicable Building Standards. By its execution hereof, Tenant accepts in all respects the Scope of Work. Any future changes thereto which increases Landlord's costs shall be implemented at the sole cost and expense of Tenant. Tenant acknowledges that the performance of work shall cause minor disturbance and interference to the operations of Tenant at the Demised Premises. Landlord agrees that it shall commence the work described on Schedule B as soon as commercially practical based on Tenant's vacation and available work space and to continue towards completion in a commercial reasonable manner.

7 . **Right of Termination.** Tenant shall have a one (1) time option (the "Cancellation Option") to terminate the Lease pursuant to the provisions of this Paragraph. If properly exercised, the cancellation of this Lease pursuant to the Cancellation Option shall be effective as of the fortieth (40th) month after the Commencement Date (the "Cancellation Date"). Not later than the last day of the twenty eighth (28th) month calculated from the Commencement Date, Tenant must give Landlord written notice of Tenant's election to exercise the Cancellation Option (the "Cancellation Notice"). As a condition of Tenant's rights hereunder, no Event of Default (beyond notice and any applicable grace period) shall exist either on the date that Tenant exercises the Cancellation Option and up to, and on and as of, the Cancellation Date. Tenant shall pay to Landlord, a fee (the "Cancellation Fee") in an amount equal to the unamortized portion (as of the Cancellation Date) of (i) the Landlord's costs for Landlord's Work (iii) the unamortized rent abatement and (iii) the leasing commissions and legal fees paid by Landlord in connection with this Lease (collectively, "Landlord's Costs"). Landlord's Costs will be amortized over the period commencing on the Commencement Date and continuing through the scheduled expiration date of this Lease at an annual interest rate of eight (8%) percent. Such payment shall be made on the date upon which the Cancellation Notice is served. If Tenant timely and properly exercises the Cancellation Option (time being of the essence): (i) all Fixed Basic Rent and additional rent payable under this Lease shall be paid through and apportioned as of the Cancellation Date (in addition to payment by Tenant of the Cancellation Fee); (ii) neither party shall have any rights, estates, liabilities or obligations under this Lease for the period accruing after the Cancellation Date, except those which, by the provisions of this Lease, expressly survive the expiration or termination of the term of this Lease; and (iii) Tenant shall surrender and vacate the Premises and deliver possession thereof to Landlord on or before the Cancellation Date in the condition required under this Lease for surrender of the Demised Premises including all restoration required under the Lease. If Tenant fails to vacate, Tenant shall be deemed to have committed an Event of Default under the Lease as amended hereby. Upon completion of Landlord's Work and after the Commencement Date is determined, Landlord shall provide Tenant with a detail of the Cancellation Fee within thirty (30) days of written request by Tenant.

8. **Notice to Landlord and Tenant/Rent Payment Address.** Any notice, statement, demand, request or other communication required or permitted to be given and all payments of Rent and Additional Rent shall be sent to Landlord as follows:

Lenox Drive Office Park LLC
c/o Vision Management, LLC
1009 Lenox Drive, Suite 100
Lawrenceville, New Jersey 08648

Tenant agrees that it shall pay Fixed Basic Rent and any Additional Rent and all payments due under the Lease as amended to Landlord by an ACH or wire procedure after receipt of appropriate information from Landlord.

9. **Broker.** Tenant and Landlord mutually represent and warrants to each other Landlord that except for the broker described in Section 23 of the Original Lease and Landlord's broker (collectively the "**Broker**") no other broker or real estate agent was engaged or employed in connection with this First Amendment. Landlord represents that it shall pay the Broker a commission pursuant to a separate written agreement. Each party hereby indemnifies and holds the other harmless from and against any and all costs, claims, losses, liabilities and expenses (including, without limitation, reasonable attorneys' fees and disbursements) arising out of any breach of the foregoing representation.

10. **Security Deposit.** The parties hereby confirm that Landlord is holding a Security Deposit in the form of a Letter of Credit in the amount of \$100,000.00 which shall apply to the Demised Premises and this First Amendment. Landlord agrees that after the Commencement Date and provide Tenant is not in default hereof after any applicable notice and grace period, Tenant shall be entitled to reduce the Security Deposit to the total sum of \$50,000.00. Accordingly, Tenant shall be entitled to replace the existing Security Deposit by either a cash deposit or new letter of credit in the amount of \$50,000.00. Landlord and Tenant shall cooperate with the replacement and return procedures.

11. **Ratification.** Tenant confirms and ratifies that, as of the date hereof: (a) Tenant is the Tenant under the Lease and has neither assigned the Lease as amended nor subleased any portion of the Premises; (b) the Lease as amended and as further amended herein, is and remains in good standing and in full force and effect; (c) Landlord is not in default of any of its obligations under the Lease, nor, to Tenant's knowledge, has any event occurred which, with the giving of notice of the passage of time or both would constitute a default by Landlord under the Lease; and (d) Tenant has no claims, counterclaims, set-offs or defenses against Landlord arising out of the Lease as amended.

12. **Binding Effect/Governing Law.** Except as modified hereby, the Original Lease as amended by the First Amendment shall remain in full force and effect, and shall be binding upon Landlord and Tenant and their respective successors and assigns. This First Amendment shall be governed by the law of the State of New Jersey.

13. **Conflicts.** If any inconsistency exists or arises between the terms of this First Amendment and the terms of the Original Lease, the terms of this First Amendment shall prevail.

14. **Counterparts.** This First Amendment may be executed in multiple counterparts, each of which shall constitute an original, but all of which shall constitute one and the same document. Signatures transmitted via facsimile or e-mail shall have the same binding effect as original signatures. Promptly following any facsimile transmittal or e-mail transmittal of signatures in "PDF" format, the parties shall deliver to each other the original executed document (it being agreed and understood that the delivery of such original shall not be a condition to the binding nature of the facsimile or electronic copy of the document).

15. **Continuation of Lease.** Except as set forth above, the Lease as modified by this First Amendment shall continue in full force and effect in accordance with its terms subject to the following modifications which shall govern from and after the Commencement Date:

(a) The cleaning specifications attached hereto as Schedule C shall apply;

(b) The Building Standards for the Building attached hereto as Schedule D shall apply;

(c) Section 18 B of the Lease shall be modified to delete Tenant's right of set off except upon receipt of a monetary judgment in favor of Tenant issue by a court of competent jurisdiction;

(d) Section 25 of the Lease is deemed modified to provide that the Tenant shall not have the right to terminate the Lease on account of Landlord's exercise of its right of relocation as otherwise described in Section 25.

(e) Section 31 (Expansion) and Section 33 (Tenants Economic Incentives) shall no longer apply and shall be deemed null and void.

16. **Confidentiality.** The terms of this First Amendment shall remain confidential and shall not be released to any third party except as otherwise provided herein and as required by law. Nothing contained herein shall prohibit the parties hereto from releasing the terms of this First Amendment to their attorneys and/or other professionals, investors, lenders and potential purchasers of the property. Except for public announcements that may be required by law, all public announcements with the use of Tenant's name shall be subject to Tenant's prior written consent, which may be withheld in Tenant's sole discretion.

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the date and year first above written.

LANDLORD:
LENOX DRIVE OFFICE PARK, LLC

By: _____

Name: _____

Title: _____

TENANT:
CELSION CORPORATION

By: _____

Name: _____

Title: _____

SCHEDULE A

SPACE PLAN



7,565 RSF

Princeton Pike Corporate Center
997 Lenox Road - Suite 102 Lawrence Township, New Jersey
First Floor Plan

SCHEDULE B
SCOPE OF WORK

Creating the Demised Premises

Shampoo the Carpets in the Demised Premises

Paint the Demised Premises

SCHEDULE C
CLEANING SPECIFICATIONS

GENERALLY:

DAILY:

- Dust furniture, business machines, telephones, partition tops, sills, ledges and other horizontal surfaces.
- Spot clean all desk tops and furnishings to remove fingerprints and smudges. (Desks and tables not cleared of paper work material will only be dusted where desk is exposed.)
- Spot clean and polish all executive type desks and conference tables.
- Empty and damp wipe clean all ashtrays.
- Where sand urns are used, remove all debris and smooth or replace sand.
- Empty all trash receptacles, wipe out with damp cloth if necessary, replace plastic liners and remove trash to designated areas.
- All loose trash (marked by tenants as "TRASH") to be removed to designated areas. "LOOSE TRASH" means cardboard boxes, computer paper, etc.
- Spot clean all washable wall, partition and door surfaces.
- Clean and sanitize all drinking fountains. Polish stainless steel and chrome.
- Vacuum all carpeted floors with a heavy duty commercial vacuum cleaner.
- Dust mop all resilient tile, parquet, quarry, ceramic, raised computer floors and other special floor coverings and treat with the appropriate methods and material.
- Dust mop all resilient tile and other non-carpeted floor surfaces.
- Turn off all lights.
- Lock all suites.

WEEKLY:

- Dust all vertical surfaces.
- Spot clean all partitions and office window glass (removing fingerprints, smudges, etc.)

- Spray buff all resilient tile floors.
- Broom sweep or vacuum all stairs and landings.

SEMI-ANNUALLY:

- Strip and refinish all resilient tile floors, applying two (2) coats of metal interlock floor finish. (Regardless of whose approval or direction, no materials will be applied that would cause a hazardous situation or slippage.)

LAVATORIES:

DAILY:

- Clean, sanitize and polish all, vitreous fixtures including toilet bowls, urinals and sinks, using a germicidal detergent solution.
- Mop all lavatory floors.

WINDOWS:

- Clean interior and exterior surfaces of all windows semi-annually.

SCHEDULE D

BUILDING STANDARD CONSTRUCTION MATERIALS

Door size and type

Building standard door for Lessee space will be 7' rotary birch - stain grade

Building standard for Lessee space from corridor will be 7' Rotary birch – stain grade

Doors will be 3' width unless otherwise specified

All hollow metal door frames will be knock down type

Locksets

Building standard Schlage AL-Series Jupiter 626 chromium plated lever set

Locksets for corridor entrances and storage closets and passage sets for all other areas

Blinds

Building standard will be 1" Levelour mini blinds with brushed aluminum finish

Lighting

Building standard recessed fluorescent fixtures 2x4 parabolic 18 cell (no return air)

2 fixtures for each office and one fixture for every 100Sqft of open area

2 outlets for every office and one outlet for every perimeter wall of open area

1 20amp circuit per every four work stations

1 switch for every office and one switch for every open area

Building standard provides no provisions for floor outlets

Ceiling tile and grid (Lessee space) building standard

Grid standard 15/16" white grid by Armstrong

2x4 Cortega Lay-in #769 ceiling tile by Armstrong

HVAC Diffuser

Square flush diffuser (white) single baffle

One diffuser per office and conference rooms

Open area diffusers will be installed per code

Sprinkler

Normal hazard Concealed heads will be used throughout

Heads will be located per New Jersey NFPA 13 code

Paint

Building standard will consist of only one paint color Benjamin Moore eggshell finish

Flooring

Carpet

Tandus Carpet Tile 24" x 24" from quick ship line (City Walk Style)

VCT

Azrock 12" x 12" x 1/8" vinyl composite tile, Cortina Colors

Vinyl Base

Johnsonite 4" vinyl base, 1/8"

October 4, 2017

[]

Re: Inducement Offer to exercise Common Stock Purchase Warrants

To Whom It May Concern:

Celsion Corporation (the "Company") is pleased to offer to you the opportunity to exercise all of the Series AAA and Series BBB Common Stock purchase warrants set forth on Annex I attached hereto (the "Existing Warrants") currently held by you (the "Holder"). The shares underlying the Existing Warrants ("Warrant Shares") have been registered for resale pursuant to registration statement Form S-1 (File No. 333-219414) (the "Registration Statement"). The Registration Statement is currently effective and, upon exercise of the Existing Warrants pursuant to this letter agreement, will be effective for the issuance or resale, as the case may be, of the Warrant Shares. **Capitalized terms not otherwise defined herein shall have the meanings set forth in the Securities Purchase Agreement, dated as of July 6, 2017, by and among the Company and the signatories thereto (the "Purchase Agreement").**

In consideration for exercising in full all of the Existing Warrants held by you and set forth on Annex I hereto (the "Warrant Exercise"), the Company hereby offers to issue you or your designee a Series DDD Common Stock Purchase Warrant ("New Warrant") pursuant to Section 4(a)(2) of the Securities Act of 1933 ("Securities Act") to purchase up to a number of shares of Common Stock equal to **25%** of the number of Warrant Shares issued pursuant to the undersigned's exercise hereunder, which New Warrant shall be substantially in the form of the Existing Warrants, and will be exercisable 12 months following the date hereof (the "Initial Exercise Date"), and have a term of exercise of 6 months from the Initial Exercise Date, and an exercise price equal to **\$6.20**. The original New Warrant certificate(s) will be delivered within two Business Days following the date hereof. Further, the terms "Warrant(s)" and "Warrant Shares" under the Purchase Agreement shall be deemed amended so they include the New Warrant and shares of Common Stock issuable upon exercise thereof, including for purposes of Section 4.1 of the Purchase Agreement. Further, the Company hereby amends the clause defining the term "Initial Exercise Date" in the Series AAA Warrants which currently reads "*...on or after January 11, 2018*" so it reads "*at any time on or after the Closing Date...*". Notwithstanding anything herein to the contrary, in the event the Warrant Exercise would otherwise cause the Holder to exceed the beneficial ownership limitations ("Beneficial Ownership Limitation") in the Existing Warrants, the Company shall only issue such number of Warrant Shares to the Holder that would not cause such Holder to exceed the maximum number of Warrant Shares permitted thereunder with the balance to be held in abeyance until notice from such Holder that the balance (or portion thereof) may be issued in compliance with such limitations.

Expressly subject to the paragraph immediately following this paragraph below, Holder may accept this offer by signing this letter below, with such acceptance constituting Holder's exercise in full of the Existing Warrants for an aggregate exercise price of set forth on the Holder's signature page hereto (the "Warrants Exercise Price") on or before 8:00 a.m. ET on October 4, 2017.

Additionally, the Company agrees to the representations, warranties and covenants set forth on Annex A attached hereto.

From the date hereof until the end of the fifth Trading Day following the date hereof, neither the Company nor any Subsidiary shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock or Common Stock Equivalents, except the Company shall not be prevented from issuing any shares of Common Stock or Common Stock Equivalents pursuant to any existing warrant, pursuant to the terms thereof as in effect immediately prior to the date hereof.

If this Offer is accepted and the transaction documents are executed on or before 8:00 a.m. on October 4, 2017, then on or before 9:00 a.m. Eastern Time on October 4, 2017, the Company shall file a Current Report on Form 8-K with the Securities and Exchange Commission disclosing all material terms of the transactions contemplated hereunder. The Company shall also file an amendment to the prospectus supplement to the Registration Statement disclosing the amendment to the terms of the Series AAA Warrants within 48 hours. The Company represents, warrants and covenants that, upon acceptance of this offer, the shares underlying the Existing Warrants shall be issued free of any legends or restrictions on resale by Holder and all of the Warrant Shares shall be delivered electronically through the Depository Trust Company within 1 business day of the date the Company receives the Warrants Exercise Price (or, with respect to shares in that would otherwise be in excess of the Beneficial Ownership Limitation, within 2 business days of the date the Company is notified by Holder that its ownership is less than the Beneficial Ownership Limitation), with payment of such exercise price being made from time to time following the date hereof, and in any event being paid in full on or before October 19, 2017. The terms of the Existing Warrants, including but not limited to the obligations to deliver the Warrant Shares, shall otherwise remain in effect as if the acceptance of this offer were a formal Notice of Exercise (including but not limited to any liquidated damages and compensation in the event of late delivery of the Warrant Shares).

The Company acknowledges and agrees that the obligations of the Holders under this letter agreement are several and not joint with the obligations of any other holder of any other holders of Common Stock Purchase Warrants of the Company (each, an "Other Holder") under any other agreement related to the exercise of such warrants ("Other Warrant Exercise Agreement"), and the Holder shall not be responsible in any way for the performance of the obligations of any Other Holder or under any such Other Warrant Exercise Agreement. Nothing contained in this letter agreement, and no action taken by the Holders pursuant hereto, shall be deemed to constitute the Holders and the Other Holders as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Holders and the Other Holders are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by this letter agreement and the Company acknowledges that the Holders and the Other Holders are not acting in concert or as a group with respect to such obligations or the transactions contemplated by this letter agreement or any Other Warrant Exercise Agreement. The Company and the Holders confirm that the Holders have independently participated in the negotiation of the transactions contemplated hereby with the advice of its own counsel and advisors. The Holders shall be entitled to independently protect and enforce their rights, including, without limitation, the rights arising out of this letter agreement, and it shall not be necessary for any Other Holder to be joined as an additional party in any proceeding for such purpose.

The Company hereby represents and warrants as of the date hereof and covenants and agrees from and after the date hereof that none of the terms offered to any Other Holder with respect to any Other Warrant Exercise Agreement (or any amendment, modification or waiver thereof), is or will be more favorable to such Other Holder than those of the Holders and this letter agreement. If, and whenever on or after the date hereof, the Company enters into an Other Warrant Exercise Agreement, then (i) the Company shall provide notice thereof to the Holders promptly following the occurrence thereof and (ii) the terms and conditions of this letter agreement shall be, without any further action by the Holders or the Company, automatically amended and modified in an economically and legally equivalent manner such that the Holder shall receive the benefit of the more favorable terms and/or conditions (as the case may be) set forth in such Other Warrant Exercise Agreement (including the issuance of additional Warrant Shares), provided that upon written notice to the Company at any time the Holder may elect not to accept the benefit of any such amended or modified term or condition, in which event the term or condition contained in this letter agreement shall apply to the Holders as it was in effect immediately prior to such amendment or modification as if such amendment or modification never occurred with respect to the Holders. The provisions of this paragraph shall apply similarly and equally to each Other Warrant Exercise Agreement.

To accept this offer, Holder must counter execute this letter agreement and return the fully executed agreement to the Company at e-mail: MTardugno@Celsion.com, attn.: Michael H. Tardugno, on or before 8:00 am ET on October 4, 2017.

Please do not hesitate to call me if you have any questions.

Sincerely yours,

CELSION CORPORATION

By: _____

Name: Michael H. Tardugno

Title: Chairman, President and Chief Executive Officer

Accepted and Agreed to:

Name of Holder: _____

Signature of Authorized Signatory of Holder: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Warrant Shares:

Aggregate Exercise Price:
New Warrants: (25% of total Series AAA and Series BBB Warrants being exercised): _____
DTC Instructions:

Annex A

Representations, Warranties and Covenants of the Company. The Company hereby makes the following representations and warranties to the Holder:

(a) Affirmation of Prior Representations, Warranties and Covenants. The Company hereby represents and warrants to the Holder that the Company's representations and warranties as set forth in Section 3.1 and as set forth in covenants listed in Article IV of the Securities Purchase Agreement, dated as of July 6, 2017 (the "Purchase Agreement"), together with any updates in the Company's SEC Reports subsequent to the Purchase Agreement, are true and correct as of the date hereof and have been fully performed as of the date hereof in all material respects except where already so qualified therein. **Capitalized terms not otherwise defined herein shall have the meanings set forth in the Purchase Agreement.**

(b) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this letter agreement and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement by the Company and the consummation by the Company of the transactions contemplated hereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, its board of directors or its stockholders in connection therewith. This letter agreement has been duly executed by the Company and, when delivered in accordance with the terms hereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(c) No Conflicts. The execution, delivery and performance of this letter agreement by the Company and the consummation by the Company of the transactions contemplated hereby do not and will not: (i) conflict with or violate any provision of the Company's certificate or articles of incorporation, bylaws or other organizational or charter documents; or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company in connection with, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any material agreement, credit facility, debt or other material instrument (evidencing Company debt or otherwise) or other material understanding to which such Company is a party or by which any property or asset of the Company is bound or affected; or (iii) subject to the Required Approvals (as defined in the Purchase Agreement), conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected, except, in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect (as defined in the Purchase Agreement).

(d) Nasdaq Corporate Governance. The transactions contemplated under this letter agreement, comply with all rules of the Trading Market.

(e) Capitalization. The number of shares of Common Stock issued and outstanding as of October 2, 2017 was 8,354,679.

Annex I

Series AAA Warrants:
Series BBB Warrants:

**CELSION CORPORATION
CERTIFICATION**

I, Michael H. Tardugno, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Celsion Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15 (f)), for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

November 14, 2017

Celsion Corporation

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

**CELSION CORPORATION
CERTIFICATION**

I, Jeffrey W. Church, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Celsion Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15 (f)), for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

November 14, 2017

Celsion Corporation

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

CELSION CORPORATION

SECTION 1350 CERTIFICATIONS*

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), each of the undersigned hereby certifies that, to the best of his knowledge, (i) the Quarterly Report on Form 10-Q for the period ended September 30, 2017 of Celsion Corporation (the "Company") filed with the Securities and Exchange Commission on the date hereof fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act and (ii) the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the Company.

November 14, 2017

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

November 14, 2017

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

* This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

