U.S. 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: June 30, 2011

☐ 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 333-119366

NOVELOS THERAPEUTICS, INC.
(*Exact name of registrant as specified in its charter*)

DELAWARE	**04-3321804**
(*State or other jurisdiction of incorporation or organization*)	(*IRS Employer Identification No.*)

One Gateway Center, Suite 504, Newton, Massachusetts 02458
(*Address of principal executive offices*)

(617) 244-1616
(*Registrant's telephone number, including area code*)

(*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 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.
(Check one):

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Number of shares outstanding of the issuer's common stock as of the latest practicable date: 26,826,157 shares of common stock, $0.00001 par value per share, as of August 10, 2011.

NOVELOS THERAPEUTICS, INC.

FORM 10-Q INDEX

PART I. FINANCIAL INFORMATION

Item 1. *Financial Statements*

NOVELOS THERAPEUTICS, INC.
(a Development Stage Company)
CONSOLIDATED BALANCE SHEETS

	June 30, 2011 (unaudited)	December 31, 2010
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 3,313,398	$ 673,739
Restricted cash	55,000	555,000
Prepaid expenses and other current assets	53,115	51,042
Deferred issuance costs	57,700	—
Total current assets	3,479,213	1,279,781
FIXED ASSETS, NET	3,249,334	3,510,489
EXCESS PURCHASE PRICE OVER NET ASSETS ACQUIRED	1,675,462	—
OTHER ASSETS	27,222	11,872
TOTAL ASSETS	$ 8,431,231	$ 4,802,142
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	$ 365,793	$ 392,881
Accrued interest	—	305,049
Derivative liability	81,540	—
Notes payable, current portion	—	204,802
Capital lease obligations, current portion	2,159	2,085
Total current liabilities	449,492	904,817
LONG-TERM LIABILITIES:		
Convertible debt	—	2,720,985
Notes payable, net of current portion	450,000	920,941
Deferred rent	118,443	115,311
Capital lease obligations, net of current portion	5,228	6,326
Total long-term liabilities	573,671	3,763,563
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY:		
Common stock, $0.00001 par value; 150,000,000 shares authorized; 26,826,157 and 12,820,102 shares issued and outstanding at June 30, 2011 and December 31, 2010, respectively	268	128
Additional paid-in capital	35,013,267	24,178,638
Deficit accumulated during the development stage	(27,605,467)	(24,045,004)
Total stockholders' equity	7,408,068	133,762
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 8,431,231	$ 4,802,142

The accompanying notes are an integral part of these financial statements.

NOVELOS THERAPEUTICS, INC.
(a Development Stage Company)
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,		Cumulative Development-Stage Period from November 7, 2002 (date of inception) through June 30, 2011
	2011	2010	2011	2010	
COSTS AND EXPENSES:					
Research and development	$ 961,953	$ 963,144	$ 1,433,356	$ 2,100,116	$ 18,639,315
General and administrative	796,714	567,226	928,440	923,666	7,898,618
Merger costs	495,773	—	746,207	—	799,133
Total costs and expenses	2,254,440	1,530,370	3,108,003	3,023,782	27,337,066
LOSS FROM OPERATIONS	(2,254,440)	(1,530,370)	(3,108,003)	(3,023,782)	(27,337,066)
OTHER INCOME (EXPENSE):					
Grant income	—	—	44,479	—	244,479
Loss on derivative warrants	(70,393)	—	(70,393)	—	(70,393)
Interest expense, net	(270,378)	(91,438)	(426,546)	(373,852)	(443,648)
Other income (expense)	—	—	—	(573)	1,161
Total other expense, net	(340,771)	(91,438)	(452,460)	(374,425)	(268,401)
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS	$ (2,595,211)	$ (1,621,808)	$ (3,560,463)	$ (3,398,207)	$ (27,605,467)
BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	$ (0.10)	$ (0.13)	$ (0.18)	$ (0.27)	$ (2.74)
SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	25,743,781	12,820,102	19,317,642	12,820,102	10,075,059

The accompanying notes are an integral part of these financial statements.

NOVELOS THERAPEUTICS, INC.
(a Development Stage Company)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Six Months Ended June 30,		Cumulative Development-Stage Period from November 7, 2002 through June 30, 2011
	2011	2010	
Net loss	$ (3,560,463)	$ (3,398,207)	$ (27,605,467)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	290,739	291,677	2,121,936
Stock-based compensation	257,586	241,353	2,204,999
Intrinsic value of beneficial conversion feature associated with convertible debt	257,973	213,792	471,765
Issuance of stock for technology and services	—	—	89,520
Impairment of intangible assets	—	—	19,671
Loss on disposal of fixed assets	—	—	30,468
Loss on derivative warrants	70,393	—	70,393
Changes in:			
Prepaid expenses and other current assets	25,969	(19,189)	(36,945)
Accounts payable and accrued liabilities	(407,216)	(115,989)	(14,335)
Accrued interest	158,672	140,448	463,721
Deferred rent	3,132	289	118,443
Cash used in operating activities	(2,903,215)	(2,645,826)	(22,065,831)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Cash acquired in a business combination	905,649	—	905,649
Purchases of fixed assets	(23,069)	—	(5,391,250)
Proceeds from sale of fixed assets	—	—	7,000
Purchases of short-term certificates of deposit	—	—	(5,500,730)
Proceeds from short-term certificates of deposit	—	—	5,500,730
Change in restricted cash	500,000	—	(55,000)
Payment for intangible assets	—	—	(19,671)
Cash provided by (used) in investing activities	1,382,580	—	(4,553,272)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of convertible notes	—	2,720,985	2,720,985
Proceeds from long-term obligations	—	—	1,677,945
Payments on long-term obligations	(675,743)	(93,818)	(1,227,944)
Payments on capital lease obligations	(1,024)	(956)	(3,587)
Proceeds from issuance of common stock, net of issuance costs	4,866,406	—	26,576,114
Proceeds from exercise of warrant	—	—	250,000
Repurchase of common stock	—	—	(31,667)
Cash in lieu of fractional shares in a business combination	(145)	—	(145)
Change in deferred issuance costs	(29,200)	89,098	(29,200)
Cash provided by financing activities	4,160,294	2,715,309	29,932,501
INCREASE IN CASH AND EQUIVALENTS	2,639,659	69,483	3,313,398
CASH AND EQUIVALENTS AT BEGINNING OF PERIOD	673,739	980,125	—
CASH AND EQUIVALENTS AT END OF PERIOD	$ 3,313,398	$ 1,049,608	$ 3,313,398
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Interest paid	$ 13,700	$ 29,300	$ 208,689
Fair value of derivative warrants reclassified to additional paid-in capital upon cashless exercise	$ 48,339	$ —	$ 48,339
Issuance of common stock in connection with the conversion of notes payable and associated accrued interest	$ 3,184,706	$ —	$ 3,184,706
Fair value of assets acquired in exchange for securities in a business combination	$ 984,057	$ —	$ 984,057
Fair value of liabilities assumed in exchange for securities in a business combination	$ (439,616)	$ —	$ (439,616)
Excess of purchase price over net assets acquired in a business combination	$ 1,675,462	$ —	$ 1,675,462

The accompanying notes are an integral part of these financial statements.

NOVELOS THERAPEUTICS, INC.
(a Development Stage Company)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF BUSINESS, BASIS OF PRESENTATION

Novelos Therapeutics, Inc. ("Novelos" or the "Company") is a pharmaceutical company developing novel drugs for the treatment and diagnosis of cancer. On April 8, 2011, Novelos completed a business combination with Cellectar, Inc. ("Cellectar"), a privately held Wisconsin corporation that designed and developed products to detect, treat and monitor a wide variety of human cancers, and Cell Acquisition Corp. (the "Merger Subsidiary"), a Wisconsin corporation and a wholly owned subsidiary of Novelos. Pursuant to the transaction Cellectar was merged into the Merger Subsidiary (the "Acquisition", see Note 3). References in these consolidated financial statements and notes to "Cellectar" relate to the activities and financial information of Cellectar prior to the Acquisition, references to "Novelos" relate to the activities and financial information of Novelos prior to the Acquisition and references to "the Company" or "we" or "us" or "our" relate to the activities and obligations of the combined Company following the Acquisition.

Immediately prior to the Acquisition, Novelos completed a 1-for-153 reverse split of its common stock (the "Reverse Split"). Novelos then issued to the shareholders of Cellectar at that date 17,001,596 shares of its common stock as consideration for the Acquisition, representing a ratio of 0.8435 shares of Novelos common stock in exchange for one share of Cellectar common stock (the "Exchange Ratio") as set forth in the merger agreement dated April 8, 2011. The shares issued to Cellectar shareholders in the Acquisition constituted approximately 85% of Novelos' outstanding common stock after giving effect to the Acquisition. Upon the closing of the Acquisition, the Company completed the private placement of 6,846,537 shares of its common stock and warrants to purchase an additional 6,846,537 shares of its common stock for gross proceeds of approximately $5,135,000.

Accounting principles generally accepted in the United States require that a company whose security holders retain the majority voting interest in the combined business be treated as the acquirer for financial reporting purposes. Accordingly, the Acquisition was accounted for as a reverse acquisition whereby Cellectar was treated as the acquirer for accounting and financial reporting purposes. All per-share amounts and outstanding shares, including all common stock equivalents, and stock options, have been retroactively restated in these financial statements and notes for all periods presented to reflect the Exchange Ratio. The number of authorized shares of common stock disclosed on the balance sheet (150,000,000) represents the number of authorized shares of Novelos common stock following the Acquisition. Additionally, on the accompanying balance sheets the aggregate par value of the issued common stock was reduced to reflect the $0.00001 par value of Novelos common stock associated with the shares of Cellectar common stock adjusted for the Exchange Ratio and the difference was reclassified to additional paid-in capital.

As a result of the Acquisition, the Company has implemented a revised business plan focused on the development of the Cellectar compounds. Development of Novelos' other compounds (NOV-002 and NOV-205) has been suspended. The Company conducts its operations from Cellectar's headquarters in Madison, WI and the Company's executive offices are in Newton, MA.

The Company is subject to a number of risks similar to those of other small biopharmaceutical companies. Principal among these risks are dependence on key individuals, competition from substitute products and larger companies, the successful development and marketing of its products in a highly regulated environment and the need to obtain additional financing necessary to fund future operations.

The accompanying consolidated financial statements have been prepared on a basis that assumes that the Company will continue as a going concern and that contemplates the continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The Company has incurred losses since inception in devoting substantially all of its efforts toward research and development and has an accumulated deficit of $27,605,467 at June 30, 2011. During the six months ended June 30, 2011, the Company generated a net loss of $3,560,463 and the Company expects that it will continue to generate operating losses for the foreseeable future. The Company believes that its cash on hand following the Acquisition, plus the proceeds from the private placement completed in connection with the Acquisition, is adequate to fund operations into the fourth quarter of 2011. The Company's ability to execute its operating plan beyond that time depends on its ability to obtain additional funding via the sale of equity and/or debt securities, a strategic transaction or otherwise. The Company plans to continue to actively pursue financing alternatives, but there can be no assurance that it will obtain the necessary funding. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The accompanying balance sheet as of December 31, 2010 has been derived from audited financial statements. The accompanying unaudited consolidated balance sheet as of June 30, 2011, the consolidated statements of operations for the three and six months ended June 30, 2011 and 2010 and the consolidated statements of cash flows for the six months ended June 30, 2011 and 2010 and the related interim information contained within the notes to the consolidated financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial information. Accordingly, they do not include all of the information and the notes required by U.S. generally accepted accounting principles for complete financial statements. In the opinion of management, the unaudited interim consolidated financial statements reflect all adjustments, consisting of normal and recurring adjustments, necessary for the fair presentation of the Company's consolidated financial position at June 30, 2011 and consolidated results of its operations and its cash flows for the three and six months ended June 30, 2011 and 2010 and the period from November 7, 2002 (inception) to June 30, 2011. The results for the three and six months ended June 30, 2011 are not necessarily indicative of future results.

These unaudited consolidated financial statements should be read in conjunction with the audited financial statements and related notes thereto included in the Company's Form 8-K/A, which was filed with the SEC on June 14, 2011.

Fair Value of Financial Instruments – Financial instruments in the accompanying financial statements consist of cash equivalents, accounts payable, convertible debt and long-term obligations. The carrying amount of cash equivalents, investments and accounts payable, approximates fair value due to their short-term nature. The estimated fair value of the convertible debt, determined on an as-converted basis including conversion of accumulated unpaid interest, was approximately $0 and $3,264,000 at June 30, 2011 and December 31, 2010, respectively. The carrying value of long-term obligations, including the current portion, approximates fair value because the fixed interest rate approximates current market rate of interest available in the market.

Derivative Instruments – The Company generally does not use derivative instruments to hedge exposures to cash flow or market risks. However, certain warrants to purchase common stock that do not meet the requirements for classification as equity, in accordance with the Derivatives and Hedging Topic of the Financial Accounting Standards Board Accounting Standards Codification ("FASB ASC"), are classified as liabilities. In such instances, net-cash settlement is assumed for financial reporting purposes, even when the terms of the underlying contracts do not provide for a net-cash settlement. These warrants are considered derivative instruments because the agreements contain "down-round" provisions whereby the number of shares for which the warrants are exercisable and/or the exercise price of the warrants are subject to change in the event of certain issuances of stock at prices below the then-effective exercise price of the warrants. The number of shares issuable under such warrants was 77,729 at June 30, 2011. The primary underlying risk exposure pertaining to the warrants is the change in fair value of the underlying common stock. Such financial instruments are initially recorded at fair value with subsequent changes in fair value recorded as a component of gain or loss on derivatives in each reporting period. If these instruments subsequently meet the requirements for equity classification, the Company reclassifies the fair value to equity. At June 30, 2011, these warrants represented the only outstanding derivative instruments issued or held by the Company.

New Accounting Pronouncements — In December 2010, the FASB issued ASU No. 2010-29, *Disclosures of Supplementary Pro Forma Information for Business Combinations*, which, if comparative financial statements are presented, requires the supplemental pro forma disclosure of revenue and earnings to be presented as if the business combination had occurred at the beginning of the comparable prior annual reporting period only. This standard also expands the supplemental pro forma disclosures required under FASB ASC Topic 850, *Business Combinations*, to include a description of the nature and amount of material nonrecurring pro forma adjustments directly attributable to the business combination in the reported pro forma revenue and earnings. This standard is effective for the Company for any business combinations completed after January 1, 2011. The Company adopted the provisions of this standard during the first quarter of 2011.

In May 2011, the FASB issued ASU No. 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. Generally Accepted Accounting Principles ("GAAP") and International Financial Reporting Standards ("IFRSs").* This standard updates accounting guidance to clarify the measurement of fair value to align the guidance and improve the comparability surrounding fair value measurement within GAAP and IFRSs. The standard also updates requirements for measuring fair value and expands the required disclosures. The standard does not require additional fair value measurements and was not intended to establish valuation standards or affect valuation practices outside of financial reporting. This standard will become effective for the Company on January 1, 2012. The Company does not expect that the adoption of this standard will have a material impact when applied prospectively on the Company's financial statements or required disclosures.

In June 2011, the FASB issued ASU No. 2011-05, *Presentation of Comprehensive Income.* This standard eliminates the current option to report other comprehensive income and its components in the statement of changes in equity. The standard is intended to enhance comparability between entities that report under US GAAP and those that report under IFRS, and to provide a more consistent method of presenting non-owner transactions that affect an entity's equity. Under the ASU, an entity can elect to present items of net income and other comprehensive income in one continuous statement, referred to as the statement of comprehensive income, or in two separate, but consecutive, statements. Each component of net income and each component of other comprehensive income, together with totals for comprehensive income and its two parts, net income and other comprehensive income, would need to be displayed under either alternative. The statement(s) would need to be presented with equal prominence as the other primary financial statements. The ASU does not change items that constitute net income and other comprehensive income, when an item of other comprehensive income must be reclassified to net income or the earnings-per-share computation (which will continue to be based on net income). The new US GAAP requirements are effective for public entities as of the beginning of a fiscal year that begins after December 15, 2011 and interim and annual periods thereafter. Early adoption is permitted, but full retrospective application is required under the accounting standard. The Company does not expect that the adoption of this standard will have a material impact on our results of operations, cash flows, and financial position.

2. FAIR VALUES OF ASSETS AND LIABILITIES

In accordance with Fair Value Measurements and Disclosures Topic of the FASB ASC, the Company groups its financial assets and financial liabilities generally measured at fair value in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value.

- Level 1: Input prices quoted in an active market for identical financial assets or liabilities.
- Level 2: Inputs other than prices quoted in Level 1, such as prices quoted for similar financial assets and liabilities in active markets, prices for identical assets and liabilities in markets that are not active or other inputs that are observable or can be corroborated by observable market data.
- Level 3: Input prices quoted that are significant to the fair value of the financial assets or liabilities which are not observable or supported by an active market.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

	June 30, 2011			
	Level 1	Level 2	Level 3	Fair Value
Liabilities:				
Warrants	$ -	$ 81,540	$ -	$ 81,540

	December 31, 2010			
	Level 1	Level 2	Level 3	Fair Value
Liabilities:				
Warrants	$ -	$ -	$ -	$ -

The Company uses the Black-Scholes option pricing model and assumptions that consider, among other variables, the fair value of the underlying stock, risk-free interest rate, volatility, expected life and dividend rates in estimating fair value for the warrants considered to be derivative instruments. Assumptions used are generally consistent with those disclosed for stock-based compensation (see Note 7).

3. ACQUISITION

Merger Agreement

On April 8, 2011, Novelos acquired Cellectar through a merger with and into the Merger Subsidiary, pursuant to an Agreement and Plan of Merger (the "Merger Agreement") entered into on that date. As a result of the Acquisition, the Merger Subsidiary, which has been renamed Cellectar, Inc., owns all assets of and operates the business previously owned and operated by Cellectar.

In the Acquisition, the former stockholders of Cellectar received an aggregate number of shares of Novelos common stock constituting approximately 85% of the outstanding shares of Novelos common stock, after giving effect to the Acquisition but before giving effect to the concurrent private placement of Novelos securities described below. Prior to the Acquisition, Novelos amended and restated its certificate of incorporation and in connection therewith, among other things, effected a 1-for-153 reverse split of its common stock (the "Reverse Split"). Immediately prior to the Acquisition, there were approximately 2,959,871 shares of Novelos common stock outstanding. Novelos then issued 17,001,596 shares of Novelos common stock to the stockholders of Cellectar upon the effective date of the Acquisition. Warrants and options to purchase Novelos common stock that were outstanding prior to the Acquisition remained outstanding following the Acquisition. These consist of warrants to purchase a total of 315,164 shares of Novelos common stock with prices ranging from $16.07 to $191.25 and options to purchase a total of 49,159 shares of Novelos common stock with prices ranging from $1.53 to $1,072.53.

XMS Capital Partners, the financial advisor to Cellectar in connection with the Acquisition, received a cash fee of $200,000 upon the completion of the Acquisition in consideration of their services. Rodman & Renshaw, LLC ("Rodman"), financial advisor to Novelos in connection with the Acquisition, received a cash fee of $250,000 upon the completion of the Acquisition in consideration of their services. These amounts were recorded as merger costs and expensed as incurred on the date of the Acquisition. In addition to the investment banking fees, the Company also expensed an additional $45,773 and $296,207 of merger-related legal and other costs during the three and six months ended June 30, 2011, respectively.

The Acquisition was completed principally to leverage synergies between Novelos' strategic focus and experience in developing and funding the development of cancer drugs and Cellectar's portfolio of cancer-targeted compounds.

Purchase Accounting

The Acquisition was accounted for using the purchase method of accounting as a reverse acquisition. In a reverse acquisition, the post-acquisition net assets of the surviving combined company includes the historical cost basis of the net assets of the accounting acquirer (Cellectar) plus the fair value of the net assets of the accounting acquiree (Novelos). Further, under the purchase method, the purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values and the excess of the purchase price over the estimated fair value of the identifiable net assets is presented as excess purchase price over net assets acquired. The cost of acquisition and related purchase-price allocation is based on preliminary evaluation of the fair value of assets and liabilities assumed from Novelos and may change when the final valuation of certain intangible assets is determined. The evaluation is preliminary principally due to the pending evaluation of the Company's intangible assets. The excess of purchase price over net assets acquired will be allocated to intangibles and goodwill once the Company completes the final allocation of purchase price.

The fair value of the consideration transferred in the Acquisition was $2,219,903 and represents the fair value of common stock that Cellectar would have had to issue in order for Novelos shareholders to obtain a 15% equity interest in the combined Company post-acquisition, taking into effect the conversion of the Convertible Notes (Note 4). The estimated fair value of the Company's common stock was based on the offering price of the common stock sold in the private placement which occurred concurrently with the Acquisition and which is the best indication of fair value on that date.

The following table summarizes the Company's preliminary estimated fair values of the assets acquired and the liabilities assumed at the date of acquisition.

Consideration - issuance of securities	$2,219,903
Prepaid expenses and other assets	$ 71,892
Fixed assets	6,515
Accrued liabilities	(380,130)
Derivative liability	(59,485)
Excess of purchase price over net assets acquired	1,675,462
Total purchase price – net of cash acquired of $905,649	$1,314,254

The excess of purchase price over net assets acquired will be allocated to intangibles, which could potentially include the fair value of the compounds developed prior to the Acquisition by Novelos, with the remainder allocated to goodwill once the Company completes the final allocation of purchase price. The estimated fair values of assets acquired and liabilities assumed are provisional and are based on the information that was available as of the acquisition date to estimate the fair value of assets acquired and liabilities assumed. The Company believes that the information provides a reasonable basis for estimating the fair values of assets acquired and liabilities assumed, but the Company is waiting for additional information necessary to finalize those fair values. Therefore, the provisional measurements of fair value reflected are subject to change and such changes may be significant. The Company expects to finalize the valuation and complete the purchase price allocation as soon as practicable but no later than one year from the acquisition date.

4. CONVERTIBLE DEBT

On January 25, 2010, Cellectar issued nine convertible promissory notes ("Convertible Notes") in an aggregate principal amount of $2,720,985. The Convertible Notes provided for interest of 12% compounded annually with a maturity date of the earlier of (i) the date on which Cellectar's cash reserves fall below $250,000 or (ii) January 20, 2011. Upon an event of default, as defined, the interest rate increased by 10% to 22%. The outstanding principal balance, together with any unpaid interest, was convertible immediately, by the lender, into common stock of the Company at $0.82987 per share (giving effect to the Exchange Ratio). Furthermore, the Convertible Notes were subject to an automatic conversion feature, equal to 70% of the per share price of the qualified financing, should the Company complete a qualified financing transaction which raises at least $20,000,000 in proceeds to the Company. Since the Convertible Notes were convertible into common stock at date of issuance at a per share price which was less than the estimated fair value of the Company's common stock at that date, the Convertible Notes contained a beneficial conversion feature ("BCF"). The estimated intrinsic value of the BCF of $213,792 was determined as the difference between the conversion price and the estimated fair value of Cellectar common stock on the date of issuance, multiplied by the 3,278,786 shares of common stock into which the Convertible Notes were convertible at issuance. This amount was recorded as a component of interest expense on the date of issuance. The estimated per-share fair value of Cellectar common stock was determined by management based on a number of factors including an independent valuation, which was determined to be the best indication of the fair value as of the issuance date of the Convertible Notes. Since the conversion price was subject to adjustment in the event of a qualified transaction, as defined, the Convertible Notes also contain a contingent beneficial conversion feature ("CBCF"). This contingency was not resolved; therefore no intrinsic value was allocated to the CBCF.

On January 20, 2011, the Convertible Notes matured but remained unpaid. Following the maturity and default of the Convertible Notes, the holders of the Convertible Notes agreed that all of the outstanding notes would be automatically converted simultaneous with the completion of an acquisition and financing (the "Conversion Time"), if completed. The amount of shares issued upon such conversion would be dependent on whether a minimum investment was made by the note holders at the Conversion Time and amounts were negotiated based on outstanding principal and projected accrued interest based on an assumed closing date for the acquisition and financing. Since the number of shares to be issued upon conversion could not be determined until the Conversion Time the Convertible Notes contained a CBCF. On April 1, 2011, Cellectar's board of directors voted to accept the note holders consent to convert the Convertible Notes into 4,181,535 shares of common stock immediately prior to the Acquisition, which conversion occurred on April 8, 2011. Upon conversion of the Convertible Notes, the Company reclassified the aggregate outstanding principal and interest totaling $3,184,706 to a component of additional paid-in capital. The revised conversion terms resulted in the issuance of an additional 343,963 shares of common stock over the 3,837,572 shares of common stock that would have been issued if the unpaid principal and accrued interest on the Convertible Notes had been converted on that date in accordance with their original terms at the stated conversion price. At the Conversion Time, the Company determined that the value of these additional shares was $257,973, based on the $0.75 per share offering price of the common stock sold in the private placement completed concurrently with the Acquisition, which is the best indication of fair value on that date. Since the final conversion terms were not finalized until April 1, 2011 and the conversion was not completed until April 8, 2011, the value of the additional shares of $257,973 was recorded as a component of interest expense in the three months ended June 30, 2011.

5. LONG-TERM NOTES PAYABLE

On January 11, 2008, Cellectar entered into a loan agreement with a bank to borrow up to $1,200,000. The borrowing, evidenced by a note (the "Bank Note"), bore interest at a rate of 7.01% per annum, could be prepaid without penalty and was payable in 48 monthly principal and interest payments of $20,520 with a balloon payment of any remaining unpaid principal and interest on March 28, 2012. In the event of default of payment, Cellectar would be required to pay a late charge equal to 5% of the delinquent payment and the interest rate on the unpaid principal would be increased by 3%. The Bank Note was collateralized by substantially all assets of Cellectar and a deposit account in the amount of $500,000. On April 8, 2011, immediately prior to the Acquisition, the Company paid $627,075 in full settlement of the Bank Note and the associated restriction on cash was released. The payment was made in order to avoid an event of default that would have occurred as a result of the change of control that occurred at the time of the Acquisition.

On September 15, 2010, Cellectar entered into certain loan agreements with the Wisconsin Department of Commerce ("WDOC Notes") to borrow a total of $450,000. The WDOC Notes bear interest at 2% per annum beginning on the date of disbursement and allow for the deferral of interest and principal payments until April 30, 2015. In the event of default of payment, interest on the delinquent payment is payable at a rate equal to 12% per annum. Monthly payments of $20,665 for principal and interest shall commence on May 1, 2015 and continue for 23 equal installments with the final installment of any remaining unpaid principal and interest due on April 1, 2017. As of June 30, 2011, $450,000 is classified as a long-term note payable in the accompanying balance sheet.

6. STOCKHOLDERS' EQUITY

April 2011 Private Placement

Concurrently with the execution of the Merger Agreement, the Company entered into a Securities Purchase Agreement with certain accredited investors under which the Company sold an aggregate of 6,846,537 units, each unit consisting of one share of its common stock and a warrant to purchase one share of its common stock, at a price of $0.75 per unit, for gross proceeds of approximately $5,135,000 (the "April Private Placement"). The warrants have an exercise price of $0.75 and expire on March 31, 2016. The warrant exercise price and/or the common stock issuable pursuant to such warrant will be subject to adjustment only for stock dividends, stock splits or similar capital reorganizations so that the rights of the warrant holders after such event will be equivalent to the rights of warrant holders prior to such event. The relative fair value of the warrants issued to the investors at the date of issuance was $2,124,286 and has been included as a component of stockholders' equity. The Company uses the Black-Scholes option pricing model to value warrants and applies assumptions that consider, among other variables, the fair value of the underlying stock, risk-free interest rate, volatility, expected life and dividend rates in estimating fair value for the warrants. Assumptions used are generally consistent with those disclosed for stock-based compensation (see Note 7).

The Securities Purchase Agreement includes a requirement that the Company file with the SEC no later than October 5, 2011, a registration statement covering the resale of the shares of common stock, and the shares of common stock underlying the warrants, issued pursuant to the Securities Purchase Agreement that are not otherwise saleable under an available exemption from registration requirements. The Company is also required to use our commercially reasonable efforts to have the registration statement declared effective by December 4, 2011, and to keep the registration statement continuously effective under the Securities Act of 1933, as amended (the "Securities Act"), until the earlier of the date when all the registrable securities covered by the registration statement have been sold or the second anniversary of the closing.

In the event the Company fails to file the registration statement within the timeframe specified by the Securities Purchase Agreement, or if it fails to obtain effectiveness of this registration on or prior to the December 4, 2011 (if there is no review by the SEC) or by January 3, 2012 (if there is review by the SEC) with respect to the maximum number of shares permitted to be registered by the SEC, the Company will be required to pay to the purchasers liquidated damages equal to 1.5% per month (pro-rated on a daily basis for any period of less than a full month) of the aggregate purchase price of the units purchased until the registration statement is filed or declared effective, as applicable, not to exceed 5% of the aggregate purchase price. The Company will be allowed to suspend the use of the registration statement for not more than 30 consecutive days, on not more than two occasions, in any 12-month period. The Company has also granted piggy-back registration rights with respect to any shares of common stock that it is required to exclude from the registration statement as a condition of its effectiveness, and has also agreed to file further registration statements with respect to any such shares six months after the effective date of the initial registration statement. As of June 30, 2011, and through the date of this filing, the Company has not concluded that it is probable that damages will become due; therefore, no accrual for damages has been recorded.

The Company paid to Rodman, the placement agent for the financing, a cash fee equal to $200,000 and issued warrants to purchase 192,931 shares of its common stock (having an exercise price of $0.75 and which expire March 31, 2016) in consideration for their advisory services with respect to the financing pursuant to the placement agency agreement between Rodman and the Company. Rodman is entitled to registration rights with respect to the shares of common stock issuable upon exercise of these warrants. The cash fee was recorded as a reduction of gross proceeds received. The estimated fair value of the warrants issued to the placement agent was $112,096 and was recorded as a component of stockholders' equity. The Company uses the Black-Scholes option pricing model to value warrants and applies assumptions that consider, among other variables, the fair value of the underlying stock, risk-free interest rate, volatility, expected life and dividend rates in estimating fair value for the warrants. Assumptions used are generally consistent with those disclosed for stock-based compensation (see Note 7).

Common Stock Warrants — The following table summarizes information with regard to outstanding warrants to purchase common stock as of June 30, 2011. The Company issued warrants to purchase 7,039,468 shares of common stock in connection with the April Private Placement. In addition, outstanding warrants to purchase 315,164 shares of common stock, originally issued in connection with Novelos equity and debt financings from 2007 through 2010, remained outstanding subsequent to the Acquisition.

Offering	Number of Shares Issuable Upon Exercise of Outstanding Warrants	Exercise Price	Expiration Date
April 8, 2011 Private Placement	7,039,468	$ 0.75	March 31, 2016
Series B Preferred Stock – placement agents	5,392	$ 191.25	May 2, 2012
Series C Exchange	8,169	$ 191.25	May 2, 2012
Series E Preferred Stock	60,330	$ 99.45	December 31, 2015
August 2009 Private Placement	31,194	$ 100.98	December 31, 2015
July 2010 Direct Offering (1)	77,729	$ 0.75	July 27, 2015
Preferred Incentive Warrants	105,040	$ 16.07	July 27, 2015
Total	7,327,322		

(1) The exercise price of these warrants was adjusted to $0.75 per share in connection with the private placement completed on April 8, 2011. This warrant is treated as a derivative instrument as described in Note 1.

On May 4, 2011, 18,153 shares of common stock were issued in connection with the cashless exercise of warrants to purchase 27,310 shares of common stock at $0.75 per share. The Company reclassified $48,339 from the derivative liability to additional paid-in capital upon the exercise of the warrants.

7. STOCK-BASED COMPENSATION

In connection with the Acquisition, the Company assumed options to purchase 49,159 shares of common stock at exercise prices ranging from $1.53 to $1,072.53.

Following the Acquisition, option grants to directors and employees will be made under the Novelos Therapeutics 2006 Stock Incentive Plan (the "2006 Plan"). On May 18, 2011, the Board of Directors approved certain amendments to the 2006 Plan and on June 30, 2011, the Company's stockholders ratified those amendments. A total of 7,000,000 shares of common stock are reserved for issuance under the 2006 Plan for grants of incentive or nonqualified stock options, rights to purchase restricted and unrestricted shares of common stock, stock appreciation rights and performance share grants. A committee of the board of directors determines exercise prices, vesting periods and any performance requirements on the date of grant, subject to the provisions of the 2006 Plan. Options are granted at or above the fair market value of the common stock at the grant date and expire on the tenth anniversary of the grant date. Vesting periods are generally between one and four years. Options granted pursuant to the 2006 Plan generally will become fully vested upon a termination event occurring within one year following a change in control, as defined. A termination event is defined as either termination of employment or services other than for cause or constructive termination of employees or consultants resulting from a significant reduction in either the nature or scope of duties and responsibilities, a reduction in compensation or a required relocation. There are an aggregate of 3,476,112 shares available for grant under the 2006 Plan.

The following table summarizes amounts charged to expense for stock-based compensation related to employee and director stock option grants and stock-based compensation recorded in connection with stock options granted to non-employee consultants:

	Six Months Ended June 30,		Cumulative Development Stage from November 7, 2002 (date of inception) to June 30, 2011
	2011	2010	
Employee and director stock option grants:			
Research and development	$ 54,991	$ 42,048	$ 353,376
General and administrative	136,455	199,305	1,713,758
	191,446	241,353	2,067,134
Non-employee consultant stock option grants:			
Research and development	17,287	—	17,287
General and administrative	48,853	—	120,578
	66,140	—	137,865
Total stock-based compensation	$ 257,586	$ 241,353	$ 2,204,999

On May 18, 2011, the Company canceled 100,000 options originally granted on April 25, 2011 with an exercise price of $3.00 per share and issued 100,000 replacement stock option awards with an exercise price of $1.40. The cancelation and replacement constituted a modification to the terms of the award and additional stock-based compensation was measured as the excess of the fair value of the modified award over the fair value of the original award immediately before the modification. Accordingly, incremental stock-based compensation expense of $4,494 was recorded in connection with the modification.

The Company granted 3,496,400 stock options to employees and non-employees during the three months ended June 30, 2011 under the 2006 Plan. The Company issued options to purchase a total of 200,000 shares of common stock to non-employees outside of any formalized plan, but 100,000 were forfeited as a result of the cancelation and replacement as described above. Exercise prices for all grants of options to purchase common stock made during the six months ended June 30, 2011 were equal to the market value of the Company's common stock on the date of grant.

Assumptions Used In Determining Fair Value

Valuation and amortization method. The fair value of each stock award is estimated on the grant date using the Black-Scholes option-pricing model. The estimated fair value of employee stock options is amortized to expense using the straight-line method over the vesting period.

Volatility. The Company estimates volatility based on an average of (1) the Company's historical volatility since its common stock has been publicly traded and (2) review of volatility estimates of publicly held drug development companies with similar market capitalizations.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant commensurate with the expected term assumption.

Expected term. The expected term of stock options granted is based on an estimate of when options will be exercised in the future. The Company applied the simplified method of estimating the expected term of the options, as described in the SEC's Staff Accounting Bulletins 107 and 110, as the Company has had a significant change in its business operations as result of the Acquisition and the historical experience is not indicative of the expected behavior in the future. The expected term, calculated under the simplified method, is applied to groups of stock options that have similar contractual terms. Using this method, the expected term is determined using the average of the vesting period and the contractual life of the stock options granted. The Company applied the simplified method to non-employees who have a truncation of term based on termination of service and utilizes the contractual life of the stock options granted for those non-employee grants which do not have a truncation of service.

Forfeitures. Stock-based compensation expense is recorded only for those awards that are expected to vest. FASB ASC Topic 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered option. An annual forfeiture rate of 0% was applied to all unvested options as of June 30, 2011 as the historical experience of forfeitures is not representative of expected future forfeiture rates as a result of the significant changes in the business operations as a result of the Acquisition. This analysis will be re-evaluated semi-annually and the forfeiture rate will be adjusted as necessary. Ultimately, the actual expense recognized over the vesting period will be for only those shares that vest.

The following table summarizes weighted-average values and assumptions used for options granted to employees, directors and consultants in the periods indicated:

	Three and Six Months Ended June 30, 2011
Volatility	110%
Risk-free interest rate	1.84% – 3.17%
Expected life (years)	5.5 – 6.25
Dividend	0%
Weighted-average exercise price	$ 1.45
Weighted-average grant-date fair value	$ 1.22

A summary of stock option activity under stock option plans for the six months ended June 30, 2011 is as follows:

	Number of Shares Issuable Upon Exercise of Outstanding Options	Weighted Average Exercise Price	Weighted Average Remaining Contracted Term in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2010	769,189	$ 2.69		
Granted	—			
Canceled	(769,189)	$ 2.69		
Outstanding at March 31, 2011	—			
Options acquired in connection with a business combination	49,159	$ 100.52		
Granted	3,696,400	$ 1.45		
Canceled	(12,921)	$ 112.21		
Forfeited	(100,000)	$ 3.00		
Outstanding at June 30, 2011	3,632,638	$ 2.35		
Unvested, June 30, 2011	3,601,742	$ 1.54	9.88	$ —
Vested, June 30, 2011	30,896	$ 96.59	5.78	$ —
Exercisable at June 30, 2011	30,896	$ 96.59	5.78	$ —

The aggregate intrinsic value of options outstanding is calculated based on the positive difference between the closing market price of the Company's common stock at the end of the respective period and the exercise price of the underlying options. There were no options exercised during the six months ended June 30, 2011. Shares of common stock issued upon the exercise of options are from authorized but unissued shares.

As of June 30, 2011, there was $3,008,021 of total unrecognized compensation cost related to unvested stock-based compensation arrangements. Of this total amount, the Company expects to recognize $561,084, $1,125,400, $858,452, $387,397 and $75,688 during 2011, 2012, 2013, 2014 and 2015, respectively. The Company expects 3,601,742 in unvested options to vest in the future. The weighted-average grant-date fair value of vested and unvested options outstanding at June 30, 2011 was $3.98 and $1.17, respectively.

There were no option grants in the three and six months ended June 30, 2010.

8. NET LOSS PER SHARE

Basic and diluted net loss per share is computed by dividing net loss attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Potential common stock equivalents consist of stock options, warrants and convertible preferred stock and accumulated dividends. Since the Company has a net loss for the three and six months ended June 30, 2011, the inclusion of common stock equivalents in the computation would be antidilutive. Accordingly, basic and diluted net loss per share are the same for the three and six months ended June 30, 2011.

The following potentially dilutive securities have been excluded from the computation of diluted net loss per share since their inclusion would be antidilutive:

	Three Months Ended June 30,		Six Months Ended June 30,		Cumulative Development-Stage Period from November 7, 2002 (inception) through June 30,
	2011	2010	2011	2010	2011
Convertible debt	—	3,448,026	—	3,448,026	—
Warrants	7,327,322	—	7,327,322	—	7,327,322
Stock options	3,632,638	1,133,774	3,632,638	1,133,774	3,632,638

9. INCOME TAXES

The Company accounts for income taxes in accordance with the liability method of accounting. Under this guidance, deferred tax assets or liabilities are computed based on the difference between the financial statement and income tax basis of assets and liabilities, and net operating loss carryforwards, using the enacted tax rates. Deferred income tax expense or benefit is based on changes in the asset or liability from period to period. The Company did not record a provision or benefit for federal, state or foreign income taxes for the three or six months ended June 30, 2011 or 2010 because the Company has experienced losses on a tax basis since inception. Because of the limited operating history, continuing losses and uncertainty associated with the utilization of the NOLs in the future, management has provided a full allowance against the value of its gross deferred tax asset.

10. RELATED PARTY TRANSACTIONS

Jamey Weichert, the Company's Chief Scientific Officer, director, shareholder and principal founder, is a faculty member at the University of Wisconsin-Madison ("UW"). During the three and six months ended June 30, 2011, the Company made contributions totaling $62,500 to the UW Foundation for use towards research activities associated with the development of the Company's compounds. No payments were made to UW during the three or six months ended June 30, 2010.

11. LITIGATION

Class Action

A putative federal securities class action complaint was filed on March 5, 2010 in the United States District Court for the District of Massachusetts by an alleged shareholder of Novelos, on behalf of himself and all others who purchased or otherwise acquired Novelos common stock in the period between December 14, 2009 and February 24, 2010, against Novelos and its President and Chief Executive Officer, Harry S. Palmin. On October 1, 2010, the court appointed lead plaintiffs (Boris Urman and Ramona McDonald) and appointed lead plaintiffs' counsel. On October 22, 2010, an amended complaint was filed. The amended complaint claims, among other things, that Novelos violated Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder in connection with alleged misleading disclosures related to the progress of the Phase 3 clinical trial of NOV-002 for non-small cell lung cancer. On December 6, 2010, the defendants filed a motion to dismiss the complaint with prejudice. On January 20, 2011, the plaintiffs filed their opposition to our motion and on March 3, 2011, the defendants filed their response to the opposition. On June 23, 2011, the motion to dismiss was granted and the case was dismissed without prejudice. On August 5, 2011, the plaintiffs filed a second amended complaint realleging that the defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 in connection with alleged misleading disclosures related to the Phase 3 clinical trial for NOV-002 in non-small cell lung cancer. The defendants' responsive pleading is due by August 26, 2011. The Company believes the allegations are without merit and intends to vigorously defend against them.

BAM Dispute

On June 28, 2010, Novelos received a letter from counsel to ZAO BAM and ZAO BAM Research Laboratories (Russian companies, collectively referred to as "BAM") alleging that it modified the chemical composition of NOV-002 without prior notice to or approval from BAM, constituting a material breach of a technology and assignment agreement Novelos had entered into with BAM on June 20, 2000 (the "June 2000 Agreement"). The letter references the amendment, submitted to the FDA on August 30, 2005, to Novelos' investigational new drug application dated August 1999 as the basis for BAM's claims and demands the transfer of all intellectual property rights concerning NOV-002 to BAM. Mark Balazovsky, a director of Novelos from June 1996 until November 2006 and a shareholder of Novelos through at least June 25, 2010, is, to our knowledge, still the general director and principal shareholder of ZAO BAM. On September 24, 2010, Novelos filed a complaint in Suffolk Superior Court seeking a declaratory judgment by the court that the June 2000 Agreement has been replaced by a subsequent agreement between the parties dated April 1, 2005 (the "April 2005 Agreement"), that Novelos' obligations to BAM are governed solely by the April 2005 Agreement and that the obligations of the June 2000 agreement have been performed and fully satisfied. On November 29, 2010, BAM answered the complaint, denying the material allegations, and stating its affirmative defenses and certain counterclaims. On January 14, 2011, Novelos responded to the counterclaims, denying BAM's material allegations and stating its affirmative defenses. On June 9, 2011, BAM filed an amended counterclaim alleging additional claims related to Novelos' acquisition of Cellectar. In that amended counterclaim, BAM alleges that the acquisition evidences Novelos' abandonment of the technology assigned to it by BAM constituting a breach of the June 2000 Agreement or, if that agreement is determined to no longer be in effect, a breach of the April 2005 Agreement and/or a breach of the implied duty of good faith and fair dealing with respect to the April 2005 Agreement. On June 15, 2011 the Company filed its response to their amended counterclaim. On August 5, 2011, the Company filed a motion for judgment on the pleadings as to its declaratory judgment count and all counts of BAM's amended counterclaim. The motion has been opposed by BAM and a hearing on the motion is scheduled on September 27, 2011. The Company believes BAM's allegations and counterclaims are without merit and intend to defend vigorously against them.

We do not anticipate that these litigation contingencies will have a material impact on the Company's future financial position, results of operations or cash flows.

12. COMMITMENTS

Retention Agreements

The Company entered into retention agreements with each of its four vice presidents. The agreements provide for the lump-sum payment of six months' base salary and benefits to each such officer following a termination without cause or a resignation with good reason occurring on or before November 14, 2011. Certain of the agreements provide that if the executives were employed with Novelos as of October 1, 2010, they would receive a payment of two months' base salary as a retention bonus on that date. The retention bonus of $68,000 was paid in October 2010 and will be deducted from the severance amounts that may become payable upon a subsequent involuntary termination. The total remaining amount that may become payable to the Company's executive officers pursuant to the retention agreements is approximately $350,000.

13. SUPPLEMENTAL PRO FORMA INFORMATION

The table below summarizes revenue and net income (loss) for the periods shown as though the Acquisition occurred as of January 1, 2010:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2011	2010	2011	2010
Net (loss)	$ (2,006,662)	$ (3,419,931)	$ (3,381,503)	$ (1,238,208)

The pro forma supplemental information has been adjusted for the following:

1) Elimination of $14,000 and $96,000 of interest expense for the three months ended June 30, 2011 and 2010, respectively, and $165,000 and $169,000 of interest expense for the six months ended June 30, 2011 and 2010, respectively; such amounts relate to interest accrued on the Convertible Notes which were converted immediately prior to the Acquisition (see Note 4) and the Bank Note which was paid in full settlement of the note immediately prior to the Acquisition (see Note 5).
2) Recognition of a additional BCF of $463,000 in the three and six months ended June 30, 2010 and the elimination of BCF of $258,000 in the three and six months ended June 30, 2011 in connection with the conversion of the Convertible Notes, which is assumed to have occurred on January 1, 2010 for the purpose of pro forma presentation (see Note 4).
3) Elimination of Acquisition costs incurred during the three and six months ended June 30, 2011, respectively, which are assumed to have been incurred prior to January 1, 2010 and the elimination of $450,000 of investment banking fees incurred upon the consummation of the Acquisition on April 8, 2011 from the three and six months ended June 30, 2011 for the purpose of presentation in the pro forma statements of operations.
4) Elimination of dividends and adjustment of deemed dividends on Novelos' preferred convertible stock, which is assumed to have been exchanged for common stock on January 1, 2010 for the purpose of pro forma presentation. The deemed dividend recorded when the preferred stock was exchanged in November 2010 was recalculated based on fair value assumptions on January 1, 2010, giving effect to the Acquisition.

14. PROPOSED REVERSE STOCK SPLIT

On June 30, 2011, the Company held a special meeting of stockholders. At the meeting, the stockholders approved, among other things, separate amendments to the certificate of incorporation that would effect a reverse split of the Company's common stock within a range of 1:2 to 1:10, and authorized the Company's board of directors to determine the ratio at which the reverse split will be effected by filing the appropriate amendment to the certificate of incorporation. The purpose of the proposed reverse split is to increase the price per share of the Company's common stock in order to exceed the minimum price per share required to secure listing on a national securities exchange.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

This quarterly report on Form 10-Q includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act. For this purpose, any statements contained herein regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management, other than statements of historical facts, are forward-looking statements. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements. There are a number of important factors that could cause actual results or events to differ materially from those disclosed in the forward-looking statements we make. These important factors include our significant accounting estimates, such as those for amounts due to clinical research organizations, and clinical investigators and the risk factors set forth below under the caption "Risk Factors". Although we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and readers should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of this quarterly report.

Acquisition

On April 8, 2011, we entered into a business combination with Cellectar (the "Acquisition"). Immediately prior to the Acquisition, we completed a 1-for-153 reverse split of our common stock (the "Reverse Split"). We then issued 17,001,596 shares of our common stock to the former shareholders of Cellectar as consideration for the Acquisition, constituting approximately 85% of our outstanding common stock after giving effect to the Acquisition. Upon the closing of the Acquisition, we completed the private placement of 6,846,537 shares of our common stock and warrants to purchase an additional 6,846,537 shares of our common stock (in each case after giving effect to the Reverse Split). As a result of the Acquisition, we are implementing a revised business plan focused on the development of the Cellectar compounds. We conduct our operations from Cellectar's headquarters in Madison, WI and our executive offices are in Newton, MA. Further development of our other compounds (NOV-002 and NOV-205) has been suspended pending further evaluation.

On April 8, 2011, immediately prior to the Acquisition, Cellectar paid approximately $627,000 in full settlement of a note payable to a bank. The payment was made in order to avoid an event of default that would have occurred as a result of the change of control that occurred at the time of the Acquisition. On April 8, 2011, the holders of Cellectar convertible notes converted outstanding principal of $2,720,985 and unpaid interest thereon into a total of 4,181,535 shares of common stock.

Overview

We are a pharmaceutical company developing novel drugs for the treatment and diagnosis of cancer based on our cancer-targeting technology: CLR1401 ("COLD"), ^{131}I-CLR1404 ("HOT", a radiolabeled compound) and ^{124}I-CLR1404 ("LIGHT", labeled with a shorter-lived radioisotope, iodine-124). We believe our compounds are selectively taken up and retained in a wide variety of cancer cells (including cancer stem cells) versus normal cells. We believe our therapeutic compounds directly kill cancer cells while minimizing harm to normal cells, offering the potential for a paradigm shift in cancer therapy by providing efficacy against all three major drivers of mortality in cancer: primary tumors, metastases and cancer stem cell-based relapse. More specifically, we believe our technology enables targeted delivery to cancer cells of apoptosis-inducing Akt inhibition or, when a radioactive molecule is attached, of ionizing radiation sufficient to kill cancer cells. When radiolabeled with iodine-124 for PET imaging, our agent can provide an accurate and quantitative diagnosis of cancer, including metastases, and can also objectively predict and measure therapeutic success. Together, we believe this platform is capable of yielding multiple, distinct oncology product opportunities in a broad spectrum of cancers that would enable us to "find, treat and follow" cancer anywhere in the body in a novel, effective and highly selective way.

COLD is a cancer-targeted chemotherapy that in pre-clinical experiments inhibits the phosphatidylinosotol 3-kinase (PI3K)/Akt survival pathway, which is overexpressed in many types of cancer. As a result, COLD selectively inhibits Akt activity, induces caspase-mediated apoptosis and inhibits cell proliferation in cancer cells versus normal cells. COLD also exhibits significant *in vivo* efficacy in mouse xenograft tumor models, including non-small cell lung cancer and triple-negative breast cancers, producing long-lasting tumor growth suppression and significantly increased survival. We believe COLD has the potential to be best-in-class versus other Akt inhibitors in development due to (a) cancer cell/cancer stem cell targeting, resulting in cancer-selective inhibition of Akt and cell proliferation or (b) suitability for intravenous administration that we believe offers the prospect of greater systemic exposure and hence Akt inhibition in cancer cells, which we believe would result in superior efficacy. We expect to submit an Investigational New Drug ("IND") application to the United States Food and Drug Administration ("FDA") in late 2012.

HOT (iodine-131 radiolabeled compound) is a small-molecule, broad-spectrum, cancer-targeted molecular radiotherapeutic that we believe has first-in-class potential. HOT is comprised of a small quantity of COLD (too little for significant AKT inhibition), acting as a cancer-targeted delivery and retention vehicle, and incorporating a cytotoxic dose of radiotherapy (in the form of iodine-131, a radioisotope that is already in common use to treat thyroid and other cancer types). It is this "intracellular radiation" mechanism of cancer cell killing, coupled with selective delivery to a wide range of malignant tumor types, that imbues HOT with broad-spectrum anti-cancer activity. In 2009, Cellectar opened an IND with the FDA to study HOT in humans. In early 2010, Cellectar successfully completed a Phase 1a dosimetry trial in humans demonstrating initial safety and establishing dosing parameters for a Phase 1b dose-escalation trial. The Phase 1b dose-escalation trial is aimed at determining the Maximum Tolerated Dose, and we expect it to begin in the fourth quarter of 2011. In parallel, we expect to initiate Phase 2 efficacy trials in solid tumors in 2012 as soon as a minimal efficacious dose is established. We may determine such an effective dose upon seeing a tumor response in the Phase 1b trial or calculating it from parallel imaging trials in patients (see LIGHT below). Preclinical experiments *in vitro* (in cell culture) and *in vivo* (in animals) have demonstrated selective killing of cancer cells along with a benign safety profile. HOT's anti-tumor/survival-prolonging activities have been demonstrated in over a dozen different xenograft models (human tumor cells implanted into animals) including breast, prostate, lung, glioma (brain), pancreatic, melanoma, ovarian, uterine, renal and colorectal cancers. In all but two models, a single administration of HOT was sufficient for efficacy. In view of HOT's selective uptake and retention in a wide range of solid tumors, its single-agent efficacy in xenograft models and its non-specific mechanism of cancer-killing (radiation), we expect to first develop HOT as a monotherapy, initially for solid tumors.

LIGHT (labeled with a shorter-lived radioisotope, ^{124} Iodine-124) is a small-molecule imaging agent that we believe has first-in-class potential in detecting and quantifying cancerous tumors and metastases. LIGHT is comprised of a small quantity of COLD (too little for Akt inhibition), acting as a cancer-targeted delivery and retention vehicle, and incorporating ^{124} I, a relatively new positron emission tomography (PET) imaging isotope. PET imaging used in conjunction with CT scanning has now become the imaging method of choice in oncology. In studies to date, LIGHT selectively illuminated malignant tumors in 52 of 54 animal models of cancer, demonstrating evidence of broad-spectrum, cancer-selective uptake and retention. We expect investigator-sponsored Phase 1/2 trials of LIGHT as a PET imaging agent to begin in the fourth quarter of 2011. The trials will initially include brain metastases, lung and breast cancers. These human trials, if successful, will serve two important purposes: First, to provide proof-of-concept for LIGHT itself as a PET imaging agent with the potential to supplant the current "gold standard" agent, 18-fluoro-deoxyglucose (FDG), due to what we believe to be LIGHT's superior cancer-specificity and more favorable logistics of clinical use. Second, to accelerate clinical development of HOT by predicting efficacy and enabling estimation of efficacious doses of HOT for Phase 2 trials.

Prior to the Acquisition, for more than 10 years Novelos had been developing oxidized glutathione-based compounds for the treatment of cancer, including NOV-002, an injectable small-molecule compound based on a proprietary formulation of oxidized glutathione that Novelos had been developing for use in combination with standard of care chemotherapies for the treatment of solid tumors. From 2005 through 2010 Novelos raised approximately $67 million in capital for the development of our compounds. From November 2006 through January 2010, Novelos conducted a Phase 3 trial of NOV-002 plus first-line chemotherapy in advanced non-small cell lung cancer which, when completed in February 2010, did not meet its primary and secondary efficacy endpoints. Following the completion of the Phase 3 trial during 2010, Novelos continued clinical development of NOV-002 in breast cancer and NOV-205 in hepatitis C, although further development of those compounds has been suspended. Novelos also explored strategic alternatives which resulted in the completion of the Acquisition in April 2011.

Results of Operations

Executive summary. In March 2010, Cellectar completed a Phase 1a dosimetry trial of HOT in humans (the "Phase 1a Trial"), demonstrating initial safety and establishing dosing parameters for a Phase 1b dose-escalation trial. Following the completion of the Phase 1a Trial and as a result of limited funding, Cellectar suspended research and manufacturing activities, terminated certain non-key personnel and implemented salary reductions in an effort to contain costs while Cellectar concentrated on its fund raising efforts. The decreases in research and development costs for the six months ended June 30, 2011 compared to the six months ended June 30, 2010 are primarily attributable to the cost reduction efforts implemented in mid-2010. Following the Acquisition, we are resuming development activities in preparation for planned clinical trials in HOT and LIGHT scheduled to begin in the fourth quarter of 2011.

Research and development expense. Research and development expense consists of costs incurred in identifying, developing and testing and manufacturing product candidates, which primarily include salaries and related expenses for personnel, costs of our research and manufacturing facility, cost of manufacturing materials, fees paid to professional service providers for independent monitoring and analysis of our clinical trials, and costs to secure intellectual property. The Company analyzes its research and development expenses based on four categories as follows: clinical projects, preclinical projects, chemistry and manufacturing costs, and general fixed and overhead costs that are not allocated to the functional project costs, including personnel costs, manufacturing facility costs, related overhead costs and patent costs.

General and administrative expense. General and administrative expense consists primarily of salaries and other related costs for personnel in executive, finance and administrative functions. Other costs include insurance, costs for public and investor relations, directors' fees and professional fees for legal and accounting services.

Three Months Ended June 30, 2011 and 2010

Research and Development. Research and development expense for the three months ended June 30, 2011 was approximately $962,000 (comprised of $1,000 in clinical project costs, $66,000 of preclinical project costs, $47,000 of manufacturing and related costs and $848,000 in general unallocated research and development costs) compared to approximately $963,000 (comprised of $67,000 in clinical projects, $239,000 in preclinical projects, $14,000 in manufacturing costs, and $644,000 in general unallocated research and development costs) for the three months ended June 30, 2010. While total costs remained consistent between periods, the components of costs were subject to varying increases and decreases. The $66,000 and $173,000 decreases in clinical and preclinical projects, respectively in the three months ended June 30, 2011 versus the comparable period in 2010 were related to Cellectar's cost reduction initiatives implemented in mid-2010 as described above. We anticipate that clinical and preclinical research activities will increase in the third quarter of 2011. Manufacturing costs increased, including a $22,000 increase in manufacturing supplies and a $10,000 increase in license and permit costs because research and manufacturing activities were resumed following the Acquisition. Fixed and overhead costs increased as follows: salaries and related costs increased approximately $102,000 principally as a result of certain severance and retention payments that were made following the Acquisition; stock-based compensation increased approximately $28,000 as a result of stock option grants made in May 2011 following the Acquisition; repairs and maintenance costs increased by $36,000; and consulting increased by $37,000. Travel costs increased approximately $10,000 due to an increase in travel between our Boston and Madison locations.

General and Administrative. General and administrative expense for the three months ended June 30, 2011 was approximately $797,000 compared to approximately $567,000 in the three months ended June 30, 2010. The approximately $230,000, or 41%, increase is primarily due to the following factors. The cost of purchased services increased by approximately $89,000 principally as a result of increased investor relations activities and costs associated with public company reporting. Stock-based compensation increased by $49,000 associated with stock option grants made in May 2011. Salaries and related costs increased by approximately $64,000 as a result of the addition of senior management following the Acquisition. Insurance costs increased approximately $24,000.

Merger Costs. Merger costs during the three months ended June 30, 2011 consisted of $450,000 in investment banking fees, $36,000 in legal fees and $10,000 in insurance costs.

Loss on Derivative Warrants. We recorded a loss on derivative warrants of $70,000 in the three months ended June 30, 2011. This amount represents the change in fair value, during the respective period, of outstanding warrants which contain "down-round" anti-dilution provisions whereby the number of shares for which the warrants are exercisable and/or the exercise price of the warrants is subject to change in the event of certain issuances of stock at prices below the then-effective exercise prices of the warrants.

Interest expense, net. Interest expense, net for the three months ended June 30, 2011 and 2010 consists of the following:

	Three Months ended June 30,	
	2011	2010
Interest expense, convertible notes	$ (13,000)	$ (81,000)
Beneficial conversion feature, convertible notes	(258,000)	—
Interest expense, bank note	(1,000)	(15,000)
Interest income	1,000	5,000
	$ (271,000)	$ (91,000)

Since the Convertible Notes were converted based on revised conversion terms that resulted in the issuance of an additional 343,963 shares of common stock than would have been issued if the Convertible Notes had been converted in accordance with their original terms, the value of these additional shares of approximately $258,000 was recorded as a component of interest expense in the quarter ended June 30, 2011. The decrease in interest expense on the convertible notes and bank note was a result of the settlement of those obligations in connection with the Acquisition. The reduction of interest income was a result of a decrease in average cash balances and interest rates.

Six Months Ended June 30, 2011 and 2010

Research and Development. Research and development expense for the six months ended June 30, 2011 was approximately $1,433,000 (comprised of $1,000 in clinical project costs, $68,000 of preclinical project costs, $50,000 of manufacturing and related costs and $1,314,000 in general unallocated research and development costs) compared to approximately $2,100,000 (comprised of $189,000 in clinical project costs, $445,000 of preclinical project costs, $65,000 of manufacturing and related costs and $1,401,000 in general unallocated research and development costs) for the same period in 2010. The approximately $667,000, or 32%, decrease in research and development expense occurred in several categories. The $188,000 decrease in clinical projects in the six months ended June 30, 2011 versus the comparable period in 2010 was related to the completion of the Phase 1a trial in March 2010 and the $377,000 decrease in preclinical projects, for the six months ended June 30, 2011 versus the same period in 2010 was primarily related to a $335,000 decrease in subcontracted preclinical research as those activities had increased in the first half of 2010 in preparation for future clinical trials. Manufacturing costs decreased related to manufacturing and laboratory supplies as a result of the cost reduction efforts described above. General unallocated research and development costs decreased primarily as a result of a $159,000 decrease in salary and overhead costs partially offset by increases in consulting, maintenance and permitting costs as we prepared to resume manufacturing and research activities following the Acquisition. Stock-based compensation increased $30,000 as a result of stock options granted in May 2011 following the Acquisition.

General and Administrative. General and administrative expense for the six months ended June 30, 2011 was approximately $928,000 compared to approximately $924,000 in the same period of 2010. While total costs remained relatively consistent, there were fluctuations in three categories of costs. The cost of subcontracted services increased by approximately $54,000 as a result of increased investor relations activities and costs associated with public company reporting. Insurance costs increased approximately $20,000. Salaries and related costs decreased by approximately $65,000 as a result of the cost cutting initiatives described above that remained in effect for the first three months of 2011.

Merger Costs. Merger costs during the six months ended June 30, 2011 consisted of $450,000 in investment banking fees, $286,000 in legal fees and $10,000 in insurance costs.

Grant income. Qualifying therapeutic discovery projects, among others, include those designed to treat or prevent diseases or conditions by conducting pre-clinical or clinical activities for the purpose of securing FDA approval of a product. We received payments of approximately $44,000 in the first six months of 2011 under a cash grant from the U.S. Internal Revenue Service as a qualifying therapeutic discovery project credit pursuant to Patient Protection and Affordable Care Act. The payments have been recorded as a component of other income.

Loss on Derivative Warrants. We recorded a loss on derivative warrants of $70,000 in the six months ended June 30, 2011. This amount represents the change in fair value, during the respective period, of outstanding warrants which contain “down-round” anti-dilution provisions whereby the number of shares for which the warrants are exercisable and/or the exercise price of the warrants is subject to change in the event of certain issuances of stock at prices below the then-effective exercise prices of the warrants.

Interest expense, net. Interest expense, net for the six months ended June 30, 2011 and 2010 consists approximately of the following:

	Six Months Ended June 30,	
	2011	2010
Interest expense, convertible notes	$ (159,000)	$ (140,000)
Beneficial conversion feature, convertible notes	(258,000)	(214,000)
Interest expense, bank note	(6,000)	(29,000)
Interest expense, other	(7,000)	(1,000)
Interest income	3,000	10,000
	$ (427,000)	$ (374,000)

Since the Convertible Notes were converted based on revised conversion terms that resulted in the issuance of an additional 343,963 shares of common stock than would have been issued if the Convertible Notes had been converted in accordance with their original terms, the value of these additional shares of approximately $258,000 was recorded as a component of interest expense in the quarter ended June 30, 2011. Since the convertible notes were convertible into common stock at the date of issuance at a price per share which is less than the estimated fair value of our common stock at that date, the estimated intrinsic value of the beneficial conversion feature of approximately $214,000 was recorded as a component of interest expense on the date of issuance in the first three months of 2010. The increase in interest expense on the convertible notes was a result of the increased effective interest rate in effect during the first three months of 2011 until the conversion that occurred on April 8, 2011. The decrease in interest expense on the bank note was a result of the settlement of that obligation in connection with the Acquisition. The increase in other interest expense is principally a result of the issuance of notes payable to the Wisconsin Department of Commerce in September 2010. The reduction of interest income was a result of a decrease in average cash balances and interest rates.

Liquidity and Capital Resources

We have financed our operations since inception primarily through the sale of equity securities and securities convertible into equity securities. To date, Cellectar and Novelos have raised capital aggregating approximately $105 million. Novelos has raised capital aggregating approximately $78 million, including proceeds from the April 2011 private placement. Since its inception, Cellectar raised capital aggregating approximately $27 million. As of June 30, 2011, we had approximately $3,313,000 in cash and cash equivalents.

During the six months ended June 30, 2011, approximately $2,903,000 in cash was used in operations. During this period we reported a net loss of $3,560,000. However, this loss included the following non-cash items: a $70,000 loss on derivative warrants, $258,000 in stock-based compensation, $291,000 in depreciation and amortization expense and approximately $258,000 of interest expense associated with convertible notes. After adjustment for these non-cash items, we used $407,000 in cash for the payment of accounts payable and accrued liabilities resulting from the payment of vendor liabilities that had accumulated leading up to the Acquisition and private placement. Other changes in working capital provided cash of $28,000. We incurred $158,000 of accrued interest associated with notes payable that were converted to common stock on April 8, 2011. During the six months ended June 30, 2010, we used only $116,000 in cash to pay vendor liabilities, since Cellectar had taken action to reduce costs and conserve cash during that time.

During the six months ended June 30, 2011, we purchased $23,000 in fixed assets. As described above, on April 8, 2011, we completed the Acquisition. In connection with the Acquisition, we acquired cash of $905,000.

During the six months ended June 30, 2011, we repaid $676,000 in long-term obligations, including the payment, immediately prior to the Acquisition, of approximately $627,000 in full settlement of a Cellectar note payable to a bank. In connection with that repayment, restrictions were released on $500,000 of cash equivalents. On April 8, 2011, the holders of Cellectar convertible notes converted outstanding principal of $2,720,985 and unpaid interest thereon into a total of 4,181,535 shares of common stock.

Upon the closing of the Acquisition, we completed the private placement of our common stock and warrants for net proceeds of $4,866,000.

Deferred issuance costs increased by $29,000 due to payments made in connection with a proposed underwritten offering.

The accompanying consolidated financial statements have been prepared on a basis that assumes that we will continue as a going concern and that contemplates the continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. We have incurred losses since inception in devoting substantially all of our efforts toward research and development and have an accumulated deficit of $27,605,467 at June 30, 2011. During the six months ended June 30, 2011, we generated a net loss of $3,560,463 and we expect that we will continue to generate operating losses for the foreseeable future. At June 30, 2011, our cash balance was $3,313,000. We believe our cash on hand is adequate to fund operations into the fourth quarter of 2011, including the commencement of a Phase 1b clinical trial for HOT. Our ability to execute our operating plan beyond that time depends on our ability to obtain additional funding via the sale of equity and/or debt securities, a strategic transaction or otherwise. On July 1, 2011, we filed a Registration Statement on Form S-1 for an underwritten public offering of our common stock with proceeds of up to $15,000,000, excluding the underwriter's over-allotment. There can be no assurance that the registration statement will become effective or that any securities will be sold pursuant to it. We plan to actively pursue this and other financing alternatives, however we have not entered into negotiations for any such alternative transaction. There can be no assurance that we will obtain the necessary funding. Other than the uncertainties regarding our ability to obtain additional funding, there are currently no known trends, demands, commitments, events or uncertainties that are likely to materially affect our liquidity.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2011. Disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, are controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our principal executive and financial officers, to allow timely decisions regarding required disclosures.

Based on the evaluation of our disclosure controls and procedures as of June 30, 2011 our Chief Executive Officer and our Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were operating effectively.

Change in Internal Control over Financial Reporting

During the second quarter of 2011, we completed the Acquisition and, accordingly, the complexity of our financial reporting increased related to the addition of a subsidiary with remote operations, acquisition-related accounting issues and planned financing activities. As a result, we identified the need to establish the full-time position of Director of Financial Reporting. In April 2011, we filled that role with a candidate who is a CPA with experience at a "big four" public accounting firm as well as substantial public and private company experience at the management level in the area of finance and accounting, including experience in merger accounting and integration and the accounting and reporting of complex financial transactions.

The Director of Financial Reporting is performing a significant role in ensuring the accuracy and completeness of our financial reporting and the effectiveness of our disclosure controls and procedures. We have identified the changes resulting from the Acquisition and the addition of this individual in this key position as changes in the internal control over the financial reporting process that occurred during the Company's second fiscal quarter of 2011 that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Limitations on Effectiveness of Controls

In designing and evaluating our disclosure controls and procedures, our management recognizes that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met. In addition, the design of any control system is based in part on certain assumptions about the likelihood of future events. Because of these and other inherent limitations of control systems, there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

A putative federal securities class action complaint was filed on March 5, 2010 in the United States District Court for the District of Massachusetts by an alleged shareholder of Novelos, on behalf of himself and all others who purchased or otherwise acquired our common stock in the period between December 14, 2009 and February 24, 2010, against Novelos and our President and Chief Executive Officer, Harry S. Palmin. On October 1, 2010, the court appointed lead plaintiffs (Boris Urman and Ramona McDonald) and appointed lead plaintiffs' counsel. On October 22, 2010, an amended complaint was filed. The amended complaint claims, among other things, that Novelos violated Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder in connection with alleged misleading disclosures related to the progress of the Phase 3 clinical trial of NOV-002 for non-small cell lung cancer. On December 6, 2010, Novelos filed a motion to dismiss the complaint with prejudice. On January 20, 2011, the plaintiffs filed their opposition to our motion and on March 3, 2011, we filed our response to their opposition. On June 23, 2011, the motion to dismiss was granted and the case was dismissed without prejudice. Because the dismissal was without prejudice, the plaintiffs could reinstitute the proceeding by filing an amended complaint. On August 5, 2011, the plaintiffs filed a second amended complaint realleging that the defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 in connection with alleged misleading disclosures related to the Phase 3 clinical trial for NOV-002 in non-small cell lung cancer. The defendants' responsive pleading is due by August 26, 2011. We believe the allegations are without merit and intend to vigorously defend against them.

On June 28, 2010, Novelos received a letter from counsel to ZAO BAM and ZAO BAM Research Laboratories (Russian companies, collectively referred to as "BAM") alleging that we modified the chemical composition of NOV-002 without prior notice to or approval from BAM, constituting a material breach of a technology and assignment agreement we had entered into with BAM on June 20, 2000 (the "June 2000 Agreement"). The letter references our amendment, submitted to the FDA on August 30, 2005, to our investigational new drug application dated August 1999 as the basis for BAM's claims and demands the transfer of all intellectual property rights concerning NOV-002 to BAM. Mark Balazovsky, a director of Novelos from June 1996 until November 2006 and a shareholder of Novelos through at least June 25, 2010, is, to our knowledge, still the general director and principal shareholder of ZAO BAM. On September 24, 2010, Novelos filed a complaint in Suffolk Superior Court seeking a declaratory judgment by the court that the June 2000 Agreement has been replaced by a subsequent agreement between the parties dated April 1, 2005 (the "April 2005 Agreement"), that Novelos' obligations to BAM are governed solely by the April 2005 Agreement and that the obligations of the June 2000 agreement have been performed and fully satisfied. On November 29, 2010, BAM answered the complaint, denying the material allegations, and stating its affirmative defenses and certain counterclaims. On January 14, 2011, Novelos responded to the counterclaims, denying BAM's material allegations and stating our affirmative defenses. On June 9, 2011, BAM filed an amended counterclaim alleging additional claims related to Novelos' acquisition of Cellectar. In that amended counterclaim, BAM alleges that the acquisition evidences Novelos' abandonment of the technology assigned to it by BAM constituting a breach of the June 2000 Agreement or, if that agreement is determined to no longer be in effect, a breach of the April 2005 Agreement and/or a breach of the implied duty of good faith and fair dealing with respect to the April 2005 Agreement. On June 15, 2011 we filed our response to their amended counterclaim. On August 5, 2011, we filed a motion for judgment on the pleadings as to our declaratory judgment count and all counts of BAM's amended counterclaim. The motion has been opposed by BAM and a hearing on the motion is scheduled on September 27, 2011. We believe BAM's allegations and counterclaims are without merit and intend to defend vigorously against them.

Item 1A. Risk Factors

We will require additional capital in order to continue our operations, and may have difficulty raising additional capital.

We expect that we will continue to generate significant operating losses for the foreseeable future. At June 30, 2011, our consolidated cash balance was approximately $3,313,000. We believe our cash on hand is adequate to fund operations into the fourth quarter of 2011. We have expended and expect to continue to expend substantial funds on the research, development and clinical and pre-clinical testing of our drug compounds. We will require additional funds to conduct research and development, establish and conduct clinical and pre-clinical trials, establish commercial-scale manufacturing arrangements and provide for the marketing and distribution of our products. Our ability to execute our operating plan beyond that time depends on our ability to obtain additional funding via the sale of equity and/or debt securities, a strategic transaction or otherwise. On July 1, 2011, we filed a Registration Statement on Form S-1 for an underwritten public offering of our common stock with proceeds of up to $15,000,000, excluding the underwriter's over-allotment. There can be no assurance that the registration statement will become effective or that any securities will be sold pursuant to it. We plan to actively pursue this and other financing alternatives. However, there can be no assurance that we will obtain the necessary funding or that it will be available on a timely basis or upon terms acceptable to us. If we obtain capital by issuing debt or preferred stock, the holders of such securities would likely obtain rights that are superior to those of holders of our common stock.

Our capital requirements and our ability to meet them depend on many factors, including:

- the number of potential products and technologies in development;
- continued progress and cost of our research and development programs;
- Progress with pre-clinical studies and clinical trials;
- the time and costs involved in obtaining regulatory clearance;
- costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- costs of developing sales, marketing and distribution channels and our ability to sell our drugs;
- costs involved in establishing manufacturing capabilities for clinical trial and commercial quantities of our drugs;
- competing technological and market developments;
- market acceptance of our products;
- costs for recruiting and retaining management, employees and consultants;
- costs for educating physicians regarding the application and use of our products;
- our status as a Bulletin Board-listed company and the prospects for our stock being listed on a national exchange;
- uncertainty and economic instability resulting from terrorist acts and other acts of violence or war; and
- the condition of capital markets and the economy generally, both in the U.S. and globally.

We may consume available resources more rapidly than currently anticipated, resulting in the need for additional funding sooner than expected. We may seek to raise any necessary additional funds through the issuance of warrants, equity or debt financings or executing collaborative arrangements with corporate partners or other sources, which may be dilutive to existing stockholders or have a material effect on our current or future business prospects. In addition, in the event that additional funds are obtained through arrangements with collaborative partners or other sources, we may have to relinquish economic and/or proprietary rights to some of our technologies or products under development that we would otherwise seek to develop or commercialize by ourselves. If we cannot secure adequate financing when needed, we may be required to delay, scale back or eliminate one or more of our research and development programs or to enter into license or other arrangements with third parties to commercialize products or technologies that we would otherwise seek to develop ourselves and commercialize ourselves. In such event, our business, prospects, financial condition, and results of operations may be adversely affected.

We are a development stage company with a history of losses and can provide no assurance of our future operating results.

We are a development stage company and have incurred net losses and negative cash flows since inception. We currently have no product revenues, and may not succeed in developing or commercializing any products which will generate product or licensing revenues. We do not expect to have any marketable products on the market for several years. Our primary activity to date has been research and development. In addition, development of our product candidates requires a process of pre-clinical and clinical testing, during which our product candidates could fail. We may not be able to enter into agreements with one or more companies experienced in the manufacturing and marketing of therapeutic drugs and, to the extent that we are unable to do so, we will not be able to market our product candidates. Eventual profitability will depend on our success in developing, manufacturing, and marketing our product candidates. Cellectar has experienced net losses and negative cash flows from operating activities since inception and we expect such losses and negative cash flows to continue in the foreseeable future. As of June 30, 2011, we had working capital of $3,029,721 and stockholders' equity of $7,408,068. For the period from Cellectar's inception in November 2002 through June 30, 2011 and for the six months ended June 30, 2011 we incurred net losses of $(27,605,467) and $(3,560,463), respectively. We may never achieve profitability.

We and our Chief Executive Officer are defendants in a securities fraud class action lawsuit. We are also defending counterclaims in another lawsuit that we initiated. If we are not successful in defending claims against us, the resulting liability could be substantial.

A putative class action complaint was filed on March 5, 2010 in the U.S. District Court for the District of Massachusetts by an alleged shareholder on behalf of himself and all others who purchased or otherwise acquired our common stock in the period between December 14, 2009 and February 24, 2010, against us and our President and Chief Executive Officer, Harry S. Palmin. The complaint claimed, among other things, that the defendants violated Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder in connection with alleged misleading disclosures related to the progress of the Phase 3 trial of NOV-002 in advanced non-small cell lung cancer. On June 23, 2011, the case was dismissed without prejudice. On August 5, 2011, the plaintiffs filed a second amended complaint realleging that the defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 in connection with alleged misleading disclosures related to the Phase 3 clinical trial for NOV-002 in non-small cell lung cancer. The defendants' responsive pleading is due by August 26, 2011.

In addition, on June 28, 2010, we received a letter from counsel to ZAO BAM and ZAO BAM Research Laboratories (Russian companies, collectively referred to as "BAM") alleging that we modified the chemical composition of NOV-002 without prior notice to or approval from BAM, constituting a material breach of a technology and assignment agreement we had entered into with BAM on June 20, 2000 (the "June 2000 Agreement"). On September 24, 2010, we filed a complaint in Suffolk Superior Court seeking a declaratory judgment by the court that the June 2000 Agreement has been replaced by a subsequent agreement between the parties dated April 1, 2005 (the "April 2005 Agreement"), that Novelos' obligations to BAM are governed solely by the April 2005 Agreement and that the obligations of the June 2000 Agreement have been performed and fully satisfied. BAM answered the complaint, denying the material allegations, and stating its affirmative defenses and certain counterclaims. In June 2011, BAM filed an amended counterclaim alleging additional claims related to Novelos' acquisition of Cellectar. On June 15, 2011 we filed our response to their amended counterclaim. On August 5, 2011, we filed a motion for judgment on the pleadings as to our declaratory judgment count and all counts of BAM's amended counterclaim. The motion has been opposed by BAM and a hearing on the motion is scheduled on September 27, 2011.

While we intend to vigorously defend ourselves in these actions, the uncertainties of litigation and the uncertainties related to insurance coverage and collection as well as the actual value of claims make it difficult to accurately predict the financial effect these claims may ultimately have on us. We may not be successful in defending such claims, and the resulting liability could be substantial and may not be covered by insurance. At the time the class action complaint was filed, we carried a total of $10 million in directors and officers liability insurance coverage, consisting of $5 million in primary coverage (including costs to defend) and $5 million in excess liability coverage. The BAM dispute is not covered by insurance. In addition, the lawsuits divert management's attention and resources, whether or not the claims are ultimately successful, and this could adversely affect our business. As a result, there can be no assurance as to the long-term effect litigation will have on our business, prospects, financial condition or results of operations.

At present, our success depends solely on the successful commercialization of Cellectar compounds.

Prior to the Acquisition, Novelos had for over ten years been developing oxidized glutathione-based compounds for the treatment of cancer, including NOV-002, an injectable small-molecule compound based on a proprietary formulation of oxidized glutathione that Novelos had been developing for use in combination with standard-of-care chemotherapies for the treatment of solid tumors, and NOV-205, a hepatoprotective agent with immunomodulating and anti-inflammatory properties.

Following the Acquisition, development of NOV-002 and NOV-205 has been suspended and we are now focused on the development of novel drugs for the treatment and diagnosis of cancer based on the cancer-targeting technologies of Cellectar: CLR1401 ("COLD"), 131 I-CLR1404 ("HOT", a radiolabeled compound) and 124 I-CLR1404 ("LIGHT", labeled with a shorter-lived radioisotope, iodine-124). As a result the successful commercialization of HOT, COLD and LIGHT is crucial for our success. Our proposed products and their potential applications are in an early stage of clinical and manufacturing/process development and face a variety of risks and uncertainties. Principally, these risks include the following:

- future clinical trial results may show that the cancer-targeting technologies of Cellectar are not well tolerated by recipients at its effective doses or are not efficacious;
- future clinical trial results may be inconsistent with Cellectar's previous preliminary testing results and data from Cellectar's earlier studies may be inconsistent with clinical data;
- even if the cancer-targeting technologies of Cellectar are shown to be safe and effective for their intended purposes, we may face significant or unforeseen difficulties in obtaining or manufacturing sufficient quantities at reasonable prices or at all;
- our ability to complete the development and commercialization of the cancer-targeting technologies of Cellectar for our intended use is substantially dependent upon our ability to obtain and maintain experienced and committed partners to assist us with obtaining clinical and regulatory approvals for, and the manufacturing, marketing and distribution of, our products;
- even if the cancer-targeting technologies of Cellectar are successfully developed, commercially produced and receive all necessary regulatory approvals, there is no guarantee that there will be market acceptance of our products; and
- our competitors may develop therapeutics or other treatments which are superior or less costly than our own with the result that our product candidates, even if they are successfully developed, manufactured and approved, may not generate sufficient revenues to offset the development and manufacturing costs of our product candidates.

If we are unsuccessful in dealing with any of these risks, or if we are unable to successfully commercialize the cancer-targeting technologies of Cellectar for some other reason, our business, prospects, financial condition, and results of operations may be adversely affected.

The integration of Novelos and Cellectar may be costly and difficult.

The successful integration of independent businesses or assets can be a complex, costly and time-consuming process. The difficulties of integrating Novelos and Cellectar include, among others:

- consolidating research and development operations;
- preserving important research and development, manufacturing and supply, and other relationships;
- minimizing the diversion of management's attention from ongoing business concerns;
- coordinating geographically separate organizations; and
- optimizing the functioning of a newly constituted Board of Directors.

We may not accomplish the integration of Novelos and Cellectar smoothly or successfully. The diversion of the attention of our management from current operations to integration efforts and any difficulties encountered in combining operations could prevent the combined company from realizing the full benefits anticipated to result from the Acquisition and may adversely affect the combined business. Additionally, the costs associated with the integration of Novelos and Cellectar may be significant. To the extent that we incur integration costs that are not anticipated, these unexpected costs could adversely impact our liquidity and force us to seek additional funding sooner than would otherwise be necessary. To date, there have been no notable difficulties encountered during integration.

We have a history of recurring losses and an accumulated deficit which, among other factors, raise substantial doubt about our ability to continue as a going concern, which may hinder our ability to obtain future financing.

Our financial statements as of December 31, 2010 were prepared under the assumption that we will continue as a going concern. The independent registered public accounting firm that audited our 2010 financial statements, in their report, included an explanatory paragraph referring to our recurring losses from operations and expressing substantial doubt in our ability to continue as a going concern without additional capital becoming available. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our ability to continue as a going concern depends on our ability to obtain additional equity or debt financing, attain further operating efficiencies, reduce expenditures, and, ultimately, to generate revenue.

The failure to complete development of our therapeutic technology, to obtain government approvals, including required FDA approvals, or to comply with ongoing governmental regulations could prevent, delay or limit introduction or sale of proposed products and result in failure to achieve revenues or maintain our ongoing business.

Our research and development activities and the manufacture and marketing of our intended products are subject to extensive regulation for safety, efficacy and quality by numerous government authorities in the U.S. and abroad. Before receiving clearance to market our proposed products by the FDA, we will have to demonstrate that our products are safe and effective for the patient population for the diseases that are to be treated. Clinical trials, manufacturing and marketing of drugs are subject to the rigorous testing and approval process of the FDA and equivalent foreign regulatory authorities. The Federal Food, Drug and Cosmetic Act and other federal, state and foreign statutes and regulations govern and influence the testing, manufacturing, labeling, advertising, distribution and promotion of drugs and medical devices. As a result, clinical trials and regulatory approval can take many years to accomplish and require the expenditure of substantial financial, managerial and other resources.

In order to be commercially viable, we must successfully research, develop, obtain regulatory approval for, manufacture, introduce, market and distribute our technologies. This includes meeting a number of critical developmental milestones including:

- demonstrating benefit from delivery of each specific drug for specific medical indications;
- demonstrating through pre-clinical and clinical trials that each drug is safe and effective; and
- demonstrating that we have established viable Good Manufacturing Practices capable of potential scale-up.

The timeframe necessary to achieve these developmental milestones may be long and uncertain, and we may not successfully complete these milestones for any of our intended products in development.

In addition to the risks previously discussed, our technology is subject to developmental risks that include the following:

- uncertainties arising from the rapidly growing scientific aspects of drug therapies and potential treatments;
- uncertainties arising as a result of the broad array of alternative potential treatments related to cancer and other diseases; and
- anticipated expense and time believed to be associated with the development and regulatory approval of treatments for cancer and other diseases.

In order to conduct the clinical trials that are necessary to obtain approval by the FDA to market a product, it is necessary to receive clearance from the FDA to conduct such clinical trials. The FDA can halt clinical trials at any time for safety reasons or because we or our clinical investigators do not follow the FDA's requirements for conducting clinical trials. If we are unable to receive clearance to conduct clinical trials for a product, or the trials are halted by the FDA, we will not be able to achieve any revenue from such product in the U.S. as it is illegal to sell any drug for use in humans in the U.S. without FDA approval.

Even if we do ultimately receive FDA approval for any of our products, these products will be subject to extensive ongoing regulation, including regulations governing manufacturing, labeling, packaging, testing, dispensing, prescription and procurement quotas, record keeping, reporting, handling, shipment and disposal of any such drug. Failure to obtain and maintain required registrations or to comply with any applicable regulations could further delay or preclude development and commercialization of our drugs and subject us to enforcement action.

Clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

In order to receive regulatory approval for the commercialization of our product candidates, we must conduct, at our own expense, extensive clinical trials to demonstrate safety and efficacy of these product candidates. Clinical testing is expensive, it can take many years to complete and its outcome is uncertain. Failure can occur at any time during the clinical trial process. For example, we incurred costs of over $35 million in clinical trial expenses over a period of 4 years in connection with the Phase 3 trial of NOV-002 for non-small cell lung cancer, and NOV-002 did not ultimately demonstrate efficacy for that indication.

We may experience delays in clinical testing of our product candidates. We do not know whether planned clinical trials will begin on time, will need to be redesigned or will be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a trial, in reaching agreement on acceptable clinical trial terms with prospective sites, in obtaining institutional review board approval to conduct a trial at a prospective site, in recruiting patients to participate in a trial or in obtaining sufficient supplies of clinical trial materials. Many factors affect patient enrollment, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, competing clinical trials and new drugs approved for the conditions we are investigating. Prescribing physicians will also have to decide to use our product candidates over existing drugs that have established safety and efficacy profiles. Any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and delay our ability to generate revenue.

In addition, the results of preclinical studies and early clinical trials of our product candidates do not necessarily predict the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through initial clinical testing. The data collected from clinical trials of our product candidates may not be sufficient to support the submission of a new drug application or to obtain regulatory approval in the United States or elsewhere. Because of the uncertainties associated with drug development and regulatory approval, we cannot determine if or when we will have an approved product for commercialization or achieve sales or profits.

Our clinical trials may not demonstrate sufficient levels of efficacy necessary to obtain the requisite regulatory approvals for our drugs, and our proposed drugs may not be approved for marketing. We suffered significant setbacks in the development of NOV-002 and NOV-205, as some of the promising results of earlier trials were not demonstrated in later stage trials. As a result, following the Acquisition, development of these compounds has been suspended.

We may be required to suspend or discontinue clinical trials due to unexpected side effects or other safety risks that could preclude approval of our product candidates.

Our clinical trials may be suspended at any time for a number of reasons. For example, we may voluntarily suspend or terminate our clinical trials if at any time we believe that they present an unacceptable risk to the clinical trial patients. In addition, regulatory agencies may order the temporary or permanent discontinuation of our clinical trials at any time if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements or that they present an unacceptable safety risk to the clinical trial patients.

Administering any product candidates to humans may produce undesirable side effects. These side effects could interrupt, delay or halt clinical trials of our product candidates and could result in the FDA or other regulatory authorities denying further development or approval of our product candidates for any or all targeted indications. Ultimately, some or all of our product candidates may prove to be unsafe for human use. Moreover, we could be subject to significant liability if any volunteer or patient suffers, or appears to suffer, adverse health effects as a result of participating in our clinical trials.

We have limited in-house research and manufacturing capacity and will rely, to some extent, on research and manufacturing facilities at various universities, hospitals, contract research organizations and contract manufacturers for a portion of our research, development, and manufacturing. In the event we exceed our in-house capacity or lose access to those facilities, our ability to gain FDA approval and commercialization of our drug delivery technology and products could be delayed or impaired.

We remain in the research and development and clinical and pre-clinical trial phase of product commercialization and have limited experience in establishing, supervising and conducting commercial manufacturing. Accordingly, if our products are approved for commercial sale, we will need to establish the capability, or engage a contract manufacturer that has the capability, to commercially manufacture our products in accordance with FDA and other regulatory requirements. There can be no assurance that we would be able to successfully establish any such capability, or indentify a suitable manufacturing partner on acceptable terms.

At the present time, we have limited research, development or manufacturing capabilities within our facilities. Our manufacturing facility in Madison, WI has adequate capacity to supply drug product for Phase 2 studies of HOT, but we will need to expand for larger Phase 3 studies. We are exploring scaling up production capacity of COLD, via contract manufacturers or at our facility, to support an IND filing and clinical trials. LIGHT is currently manufactured by our collaborator, the University of Wisconsin at Madison in small quantities, at no cost to us, for use in investigator-sponsored clinical trials pursuant to a materials transfer agreement expiring in June 2013, but which may be terminated at any time by either party. We rely and expect to continue to rely, to some extent, on contracting with third parties to use their facilities to conduct research, development and manufacturing. The limited facilities of our own in which to conduct research, development and manufacturing may delay or impair our ability to gain FDA approval and commercialization of our drug delivery technology and products.

We may rely on third-party contract research organizations, service providers and suppliers to support development and clinical testing of our products. This may expose us to the risks of not being able to directly oversee the production and quality of the manufacturing process. Furthermore, these contractors, whether foreign or domestic, may experience regulatory compliance difficulties, mechanical shutdowns, employee strikes or other unforeseeable acts that may delay production. Failure of any of these contractors to provide the required services in a timely manner or on commercially reasonable terms could materially delay the development and approval of our products, increase our expenses and materially harm our business, prospects, financial condition and results of operations.

We believe that we have a good working relationship with our contractors. However, should the situation change, we may be required to relocate these activities on short notice, and we do not currently have access to alternate facilities to which we could relocate our research, development and/or manufacturing activities. The cost and time to establish or locate an alternate research, development and/or manufacturing facility to develop our technology would be substantial and would delay obtaining FDA approval and commercializing our products.

We are exposed to product, clinical and preclinical liability risks that could create a substantial financial burden should we be sued.

Our business exposes us to potential product liability and other liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. In addition, the use, in our clinical trials, of pharmaceutical products that we or our current or potential collaborators may develop and then subsequently sell may cause us to bear a portion of or all product liability risks. While we carry an insurance policy covering up to $5,000,000 per occurrence and $5,000,000 in the aggregate of liability incurred in connection with such claims should they arise, there can be no assurance that our insurance will be adequate to cover all situations. Moreover, there can be no assurance that such insurance, or additional insurance, if required, will be available in the future or, if available, will be available on commercially reasonable terms. Furthermore, our current and potential partners with whom we have collaborative agreements or our future licensees may not be willing to indemnify us against these types of liabilities and may not themselves be sufficiently insured or have a net worth sufficient to satisfy any product liability claims. A successful product liability claim or series of claims brought against us could have a material adverse effect on our business, prospects, financial condition and results of operations.

Acceptance of our products in the marketplace is uncertain and failure to achieve market acceptance will prevent or delay our ability to generate revenues.

Our future financial performance will depend, at least in part, on the introduction and customer acceptance of our proposed products. Even if approved for marketing by the necessary regulatory authorities, our products may not achieve market acceptance. The degree of market acceptance will depend on a number of factors including:

- receiving regulatory clearance of marketing claims for the uses that we are developing;
- establishing and demonstrating the advantages, safety and efficacy of our technologies;
- pricing and reimbursement policies of government and third-party payers such as insurance companies, health maintenance organizations and other health plan administrators;
- our ability to attract corporate partners, including pharmaceutical companies, to assist in commercializing our intended products; and
- our ability to market our products.

Physicians, patients, payers or the medical community in general may be unwilling to accept, use or recommend any of our products. If we are unable to obtain regulatory approval or commercialize and market our proposed products as planned, we may not achieve any market acceptance or generate revenue.

We may face litigation from third parties who claim that our products infringe on their intellectual property rights, particularly because there is often substantial uncertainty about the validity and breadth of medical patents.

We may be exposed to future litigation by third parties based on claims that our technologies, products or activities infringe on the intellectual property rights of others or that we have misappropriated the trade secrets of others. This risk is exacerbated by the fact that the validity and breadth of claims covered in medical technology patents and the breadth and scope of trade-secret protection involve complex legal and factual questions for which important legal principles are unresolved. Any litigation or claims against us, whether or not valid, could result in substantial costs, could place a significant strain on our financial and managerial resources and could harm our reputation. The U. Mich license does require and license agreements that we may enter into in the future would likely require that we pay the costs associated with defending this type of litigation. In addition, intellectual property litigation or claims could force us to do one or more of the following:

- cease selling, incorporating or using any of our technologies and/or products that incorporate the challenged intellectual property, which would adversely affect our ability to generate revenue;
- obtain a license from the holder of the infringed intellectual property right, which license may be costly or may not be available on reasonable terms, if at all; or
- redesign our products, which would be costly and time-consuming.

If we are unable to protect or enforce our rights to intellectual property adequately or to secure rights to third-party patents, we may lose valuable rights, experience reduced market share, assuming any, or incur costly litigation to protect our intellectual property rights.

Our ability to obtain licenses to patents, maintain trade secret protection and operate without infringing the proprietary rights of others will be important to commercializing any products under development. Therefore, any disruption in access to the technology could substantially delay the development of our technology.

The patent positions of biotechnology and pharmaceutical companies, such as ours, that involve licensing agreements, are frequently uncertain and involve complex legal and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued or in subsequent legal proceedings. Consequently, our patent applications and any issued and licensed patents may not provide protection against competitive technologies or may be held invalid if challenged or circumvented. To the extent we license patents from third parties, as in the case of the U. Mich license, the early termination of any such license agreement would result in the loss of our rights to use the covered patents which could severely delay, inhibit or eliminate our ability to develop and commercialize compounds based on the licensed patents. Our competitors may also independently develop products similar to ours or design around or otherwise circumvent patents issued or licensed to us. In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as U.S. law.

We also rely on trade secrets, technical know-how and continuing technological innovation to develop and maintain our competitive position. Although we generally require our employees, consultants, advisors and collaborators to execute appropriate confidentiality and assignment-of-inventions agreements, our competitors may independently develop substantially equivalent proprietary information and techniques, reverse engineer our information and techniques, or otherwise gain access to our proprietary technology. We may be unable to meaningfully protect our rights in trade secrets, technical know-how and other non-patented technology.

We may have to resort to litigation to protect our rights for certain intellectual property, or to determine their scope, validity or enforceability. Enforcing or defending our rights is expensive, could cause diversion of our resources and may not prove successful. Any failure to enforce or protect our rights could cause us to lose the ability to exclude others from using our technology to develop or sell competing products.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.

We operate in the highly technical field of research and development of small molecule drugs, and rely in part on trade secret protection in order to protect our proprietary trade secrets and unpatented know-how. However, trade secrets are difficult to protect, and we cannot be certain that our competitors will not develop the same or similar technologies on their own. We have taken steps, including entering into confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors, to protect our trade secrets and unpatented know-how. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. We also typically obtain agreements from these parties which provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party has illegally obtained and is using our trade secrets or know-how is difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets or know-how. The failure to obtain or maintain trade secret protection could adversely affect our competitive position.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that we or these employees have used or disclosed trade secrets or other proprietary information of their former employers, either inadvertently or otherwise. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

The use of hazardous materials, including radioactive materials, in our research and development imposes certain compliance costs on us and may subject us to liability for claims arising from the use or misuse of these materials.

Our research and development, manufacturing and administration of our drugs involves the controlled use of hazardous materials, including chemicals and radioactive materials, such as radioactive isotopes. We are subject to federal, state and local laws and regulations governing the storage, use and disposal of these materials and some waste products and are required to maintain both a manufacturer's license and a radioactive materials license with State of Wisconsin agencies. We believe that our safety procedures for the storage, use and disposal of these materials comply with the standards prescribed by federal, state and local regulations. However, we cannot completely eliminate the risk of accidental contamination or injury from these materials. If there were to be an accident, we could be held liable for any damages that result, which could exceed our financial resources. We currently maintain insurance coverage, with limits of up to $2,500,000 depending on the nature of the claim, for damages resulting from the hazardous materials we use; however, future claims may exceed the amount of our coverage. Also, we do not have insurance coverage for pollution cleanup and removal. Currently the costs of complying with federal, state and local regulations are not significant, and consist primarily of waste disposal expenses and permitting fees. However, they could become expensive, and current or future environmental regulations may impair our research, development, production and commercialization efforts. If we are unable to maintain the required licenses and permits for any reason, it will negatively impact our research and development activities.

Due to our limited marketing, sales and distribution experience, we may be unsuccessful in our efforts to sell our products, enter into relationships with third parties or develop a direct sales organization.

We have not established marketing, sales or distribution capabilities for our proposed products. Until such time as our products are further along in the development process, we will not devote any meaningful time and resources to this effort. At the appropriate time, we intend to develop our own sales and marketing capabilities or enter into agreements with third parties to sell our products.

We have limited experience in developing, training or managing a sales force. If we choose to establish a direct sales force, we may incur substantial additional expenses in developing, training and managing such an organization. We may be unable to build a sales force on a cost-effective basis or at all. Any such direct marketing and sales efforts may prove to be unsuccessful. In addition, we will compete with many other companies that currently have extensive marketing and sales operations. Our marketing and sales efforts may be unable to compete against these other companies. We may be unable to establish a sufficient sales and marketing organization on a timely basis, if at all.

If we choose to enter into agreements with third parties to sell our products, we may be unable to establish or maintain third-party relationships on a commercially reasonable basis, if at all. In addition, these third parties may have similar or more established relationships with our competitors.

We may be unable to engage qualified distributors. Even if engaged, these distributors may:

- fail to adequately market our products;
- fail to satisfy financial or contractual obligations to us;
- offer, design, manufacture or promote competing products; or
- cease operations with little or no notice.

If we fail to develop sales, marketing and distribution channels, we would experience delays in product sales and incur increased costs, which would have a material adverse effect on our business, prospects, financial condition, and results of operation.

If we are unable to convince physicians of the benefits of our intended products, we may incur delays or additional expense in our attempt to establish market acceptance.

Achieving use of our products in the target market of cancer diagnosis and treatment may require physicians to be informed regarding these products and their intended benefits. The time and cost of such an educational process may be substantial. Inability to successfully carry out this physician education process may adversely affect market acceptance of our products. We may be unable to timely educate physicians regarding our intended products in sufficient numbers to achieve our marketing plans or to achieve product acceptance. Any delay in physician education may materially delay or reduce demand for our products. In addition, we may expend significant funds towards physician education before any acceptance or demand for our products is created, if at all.

The market for our products is rapidly changing and competitive, and new therapeutics, new drugs and new treatments that may be developed by others could impair our ability to maintain and grow our business and remain competitive.

The pharmaceutical and biotechnology industries are subject to rapid and substantial technological change. Developments by others may render our technologies and intended products noncompetitive or obsolete, or we may be unable to keep pace with technological developments or other market factors. Technological competition from pharmaceutical and biotechnology companies, universities, governmental entities and others diversifying into the field is intense and is expected to increase. Most of these entities have significantly greater research and development capabilities and budgets than we do, as well as substantially more marketing, manufacturing, financial and managerial resources. These entities represent significant competition for us. Acquisitions of, or investments in, competing pharmaceutical or biotechnology companies by large corporations could increase our competitors' financial, marketing, manufacturing and other resources.

We operate with limited day-to-day business management, serve as a vehicle to hold certain technology for possible future exploration, and have been and will continue to be engaged in the development of new drugs and therapeutic technologies. As a result, our resources are limited and we may experience management, operational or technical challenges inherent in such activities and novel technologies. Competitors have developed or are in the process of developing technologies that are, or in the future may be, the basis for competition. Some of these technologies may accomplish therapeutic effects similar to those of our technology, but through different means. Our competitors may develop drugs and drug delivery technologies that are more effective than our intended products and, therefore, present a serious competitive threat to us.

For example, Perifosine, an alkylphospholipid that is being developed by Keryx Biopharmaceuticals, which has licensed it in North America from Æterna Zentaris Inc., is a possible future competitor to COLD. We do not know of any current or potential direct competitors for HOT and LIGHT. Marketed drugs Zevalin (Spectrum Pharmaceuticals) and Bexxar (Glaxo Smith Kline) provide examples of targeted radiotherapeutics specifically for lymphoma indication. FDG is the current standard for PET imagining for cancer and may be an alternative diagnostic imaging agent to LIGHT.

The potential widespread acceptance of therapies that are alternatives to ours may limit market acceptance of our products even if they are commercialized. Many of our targeted diseases and conditions can also be treated by other medication or drug delivery technologies. These treatments may be widely accepted in medical communities and have a longer history of use. The established use of these competitive drugs may limit the potential for our technologies and products to receive widespread acceptance if commercialized.

If users of our products are unable to obtain adequate reimbursement from third-party payers, or if additional healthcare reform measures are adopted, it could hinder or prevent our product candidates' commercial success.

The continuing efforts of government and insurance companies, health maintenance organizations and other payers of healthcare costs to contain or reduce costs of healthcare may adversely affect our ability to generate future revenues and achieve profitability, including by limiting the future revenues and profitability of our potential customers, suppliers and collaborative partners. For example, in certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. The U.S. government and other governments have shown significant interest in pursuing healthcare reform. Any government-adopted reform measures could adversely affect the pricing of healthcare products and services in the U.S. or internationally and the amount of reimbursement available from governmental agencies or other third-party payers. The continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payers of healthcare services to contain or reduce healthcare costs may adversely affect our ability to set prices for our products, should we be successful in commercializing them, and this would negatively affect our ability to generate revenues and achieve and maintain profitability.

New laws, regulations and judicial decisions, or new interpretations of existing laws, regulations and decisions, that relate to healthcare availability, methods of delivery or payment for healthcare products and services, or sales, marketing or pricing of healthcare products and services, also may limit our potential revenue and may require us to revise our research and development programs. The pricing and reimbursement environment may change in the future and become more challenging for several reasons, including policies advanced by the current or future executive administrations in the U.S., new healthcare legislation or fiscal challenges faced by government health administration authorities. Specifically, in both the U.S. and some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. In the U.S., changes in federal healthcare policy were passed into law in 2010 and are being considered by Congress again this year. Some of these proposed reforms could result in reduced reimbursement rates for our product candidates, which would adversely affect our business strategy, operations and financial results.

Our ability to commercialize our products will depend in part on the extent to which appropriate reimbursement levels for the cost of our products and related treatment are obtained by governmental authorities, private health insurers and other organizations, such as health maintenance organizations (HMOs). Third-party payers are increasingly challenging the prices charged for medical drugs and services. Also, the trend toward managed healthcare in the U.S. and the concurrent growth of organizations such as HMOs that could control or significantly influence the purchase of healthcare services and drugs, as well as legislative proposals to reform healthcare or change government insurance programs, may all result in lower prices for or rejection of our drugs. The cost containment measures that healthcare payers and providers are instituting and the effect of any healthcare reform could materially harm our ability to operate profitably.

We depend on key personnel who may terminate their employment with us at any time, and our success will depend on our ability to hire additional qualified personnel.

Our success will depend to a significant degree on the continued services of our chief executive officer, Harry Palmin, Cellectar founder and our chief scientific officer, Jamey Weichert and our senior vice president of research and development, Christopher Pazoles. There can be no assurance that these individuals will continue to provide services to us. In addition, our success may depend on our ability to attract and retain other highly skilled personnel. We may be unable to recruit such personnel on a timely basis, if at all. Our management and other employees may voluntarily terminate their employment with us at any time. The loss of services of key personnel, or the inability to attract and retain additional qualified personnel, could result in delays in development or approval of our products, loss of sales and diversion of management resources. To date, we have not experienced difficulties attracting and retaining highly qualified personnel, but there can be no assurance we will be successful in doing so in the future.

Our stock price has experienced price fluctuations.

There can be no assurance that the market price for our common stock will remain at its current level and a decrease in the market price could result in substantial losses for investors. The market price of our common stock may be significantly affected by one or more of the following factors:

- announcements or press releases relating to the biopharmaceutical sector or to our own business or prospects;
- regulatory, legislative, or other developments affecting us or the healthcare industry generally;
- sales by holders of restricted securities pursuant to effective registration statements or exemptions from registration; and
- market conditions specific to biopharmaceutical companies, the healthcare industry and the stock market generally.

Our five largest stockholders own approximately 54% of our outstanding common stock, which limits the influence of other shareholders.

As of August 10, 2011, 54% of our outstanding common stock is controlled by our five largest shareholders, all of whom are former shareholders of Cellectar. The interests of these stockholders may differ from those of other stockholders. These stockholders will likely continue to have the ability to significantly affect the outcome of all corporate actions requiring stockholder approval, including the following actions:

- the election of directors;
- the amendment of charter documents; and
- the approval of certain mergers and other significant corporate transactions, including a sale of substantially all of our assets.

There may be a limited public market for our securities; we presently fail to qualify for listing on any national securities exchanges.

Our common stock currently does not meet all of the requirements for initial listing on a registered stock exchange. Specifically, the bid price of our common stock is less than the minimum bid price required to obtain a listing, which is why we have undertaken to effect a Reverse Split prior to the effectiveness of the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on July 1, 2011. Trading in our common stock continues to be conducted on the electronic bulletin board in the over-the-counter market. As a result, an investor may find it difficult to dispose of or to obtain accurate quotations as to the market value of our common stock, and our common stock may be less attractive for margin loans, for investment by financial institutions, as consideration in future capital raising transactions or other purposes. In connection with the offering contemplated in the registration statement filed on July 1, 2011, we have applied for listing of our common stock on The NASDAQ Capital Market under the symbol “NVLT”. No assurance can be given that our application will be approved.

Our common stock has historically been a "penny stock" under SEC rules. It may be more difficult to resell shares of common stock classified as "penny stock".

Our common stock has historically been a "penny stock" under applicable SEC rules (generally defined as non-exchange traded stock with a per share price below $5.00). These rules impose additional sales practice requirements on broker-dealers that recommend the purchase or sale of penny stocks to persons other than those who qualify as "established customers" or "accredited investors." For example, broker-dealers must determine the appropriateness for non-qualifying persons of investments in penny stocks. Broker-dealers must also provide, prior to a transaction in a penny stock not otherwise exempt from the rules, a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, disclose the compensation of the broker-dealer and its salesperson in the transaction, furnish monthly account statements showing the market value of each penny stock held in the customer's account, provide a special written determination that the penny stock is a suitable investment for the purchaser, and receive the purchaser's written agreement to the transaction.

These requirements may have the effect of reducing the level of trading activity, if any, in the secondary market for a security that becomes subject to the penny stock rules. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit the market price and liquidity of our securities. These requirements may restrict the ability of broker-dealers to sell our common stock and may affect your ability to resell our common stock.

Many brokerage firms will discourage or refrain from recommending investments in penny stocks. Most institutional investors will not invest in penny stocks. In addition, many individual investors will not invest in penny stocks due, among other reasons, to the increased financial risk generally associated with these investments.

For these reasons, penny stocks may have a limited market, and consequently, limited liquidity. We have applied for a listing of our common stock on the Nasdaq Capital Market. Upon obtaining such listing, our common stock would cease to be a penny stock. However, we can give no assurance at what time, if ever, our common stock will not be classified as a "penny stock" in the future.

If we fail to maintain effective internal controls over financial reporting, the price of our common stock may be adversely affected.

Our internal control over financial reporting may have weaknesses and conditions that could require correction or remediation, the disclosure of which may have an adverse impact on the price of our common stock. We are required to establish and maintain appropriate internal controls over financial reporting. Failure to establish those controls, or any failure of those controls once established, could adversely affect our public disclosures regarding our business, prospects, financial condition or results of operations. In addition, management's assessment of internal controls over financial reporting may identify weaknesses and conditions that need to be addressed in our internal controls over financial reporting or other matters that may raise concerns for investors. Any actual or perceived weaknesses and conditions that need to be addressed in our internal control over financial reporting or disclosure of management's assessment of our internal controls over financial reporting may have an adverse impact on the price of our common stock. During the year ended December 31, 2005, a material weakness existed in Novelos' internal controls over financial reporting with respect to the identification of and accounting for the beneficial conversion feature of a preferred stock financing transaction. This material weakness was remediated during 2006. As a result of this material weakness, we were required to restate our financial statements as of and for the quarter ended September 30, 2005 and as of and for the year ended December 31, 2005.

We are required to comply with certain provisions of Section 404 of the Sarbanes-Oxley Act of 2002 and if we fail to comply in a timely manner, our business could be harmed and our stock price could decline.

Rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 require an annual assessment of internal controls over financial reporting, and for certain issuers an attestation of this assessment by the issuer's independent registered public accounting firm. The standards that must be met for management to assess the internal controls over financial reporting as effective are evolving and complex, and require significant documentation, testing, and possible remediation to meet the detailed standards. We expect to incur significant expenses and to devote resources to Section 404 compliance on an ongoing basis. It is difficult for us to predict how long it will take or costly it will be to complete the assessment of the effectiveness of our internal control over financial reporting for each year and to remediate any deficiencies in our internal control over financial reporting. As a result, we may not be able to complete the assessment and remediation process on a timely basis. In addition, although attestation requirements by our independent registered public accounting firm are not presently applicable to us we could become subject to these requirements in the future and we may encounter problems or delays in completing the implementation of any resulting changes to internal controls over financial reporting. In the event that our Chief Executive Officer or Chief Financial Officer determine that our internal control over financial reporting is not effective as defined under Section 404, we cannot predict how regulators will react or how the market prices of our shares will be affected; however, we believe that there is a risk that investor confidence and share value may be negatively affected.

Our common stock could be further diluted as the result of the issuance of additional shares of common stock, convertible securities, warrants or options.

In the past, we have issued common stock, convertible securities (such as convertible preferred stock and notes) and warrants in order to raise money. We have also issued options and warrants as compensation for services and incentive compensation for our employees and directors. We have shares of common stock reserved for issuance upon the exercise of certain of these securities and may increase the shares reserved for these purposes in the future. Our issuance of additional common stock, convertible securities, options and warrants could affect the rights of our stockholders, could reduce the market price of our common stock or could result in adjustments to exercise prices of outstanding warrants (resulting in these securities becoming exercisable for, as the case may be, a greater number of shares of our common stock), or could obligate us to issue additional shares of common stock to certain of our stockholders.

Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act, subject to certain limitations. In general, pursuant to amended Rule 144, non-affiliate stockholders may sell freely after six months subject only to the current public information requirement. Affiliates may sell after six months subject to the Rule 144 volume, manner of sale (for equity securities), current public information and notice requirements. Of the approximately 26,826,000 shares of our common stock outstanding as of August 10, 2011, approximately 1.1 million shares are freely tradable without restriction, as of that date. Any substantial sales of our common stock pursuant to Rule 144 may have a material adverse effect on the market price of our common stock.

Provisions of our charter, bylaws, and Delaware law may make an acquisition of us or a change in our management more difficult.

Certain provisions of our amended restated certificate of incorporation and bylaws could discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock or warrants, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so.

Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

- provide for the division of our board into three classes as nearly equal in size as possible with staggered three-year terms and further limit the removal of directors and the filling of vacancies;
- authorize our board of directors to issue without stockholder approval blank check preferred stock that, if issued, could operate as a “poison pill” to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;

- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings;
- limit who may call stockholder meetings; and
- require the approval of the holders of 75% of the outstanding shares of our capital stock entitled to vote in order to amend certain provisions of our restated certificate of incorporation and restated bylaws.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time.

We have not paid dividends in the past and do not expect to pay dividends for the foreseeable future. Any return on investment may be limited to the value of our common stock.

No cash dividends have been paid on Novelos common stock. We do not expect to pay cash dividends in the near future. Payment of dividends would depend upon our profitability at the time, cash available for those dividends, and other factors as our board of directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on an investor's investment will only occur if our stock price appreciates.

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

On May 3, 2011, we issued 18,153 shares of our common stock in connection with the cashless exercise of warrants to purchase 27,310 shares of common stock at $0.75 per share. This issuance was exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Section 3(a)(9) of the Securities Act, as the shares were issued in exchange for consideration consisting solely of other securities of the Company, as well as under Section 4(2) of the Securities Act, as a transaction not involving any public offering.

Item 3. Defaults Upon Senior Securities

None.

Item 4. [Removed and Reserved]

Item 5. Other Information

None.

Item 6. Exhibits

			Incorporated by Reference		
Exhibit No.	**Description**	**Filed with this Form 10-Q**	**Form**	**Filing Date**	**Exhibit No.**
2.1	Agreement and Plan of Merger by and among Novelos Therapeutics, Inc., Cell Acquisition Corp. and Cellectar, Inc. dated April 8, 2011		8-K	April 11, 2011	2.1
3.1	Second Amended and Restated Certificate of Incorporation		8-K	April 11, 2011	3.1
3.2	Amended and Restated By-laws		8-K	June 1, 2011	3.1

Exhibit No.	Description	Filed with this Form 10-Q	Incorporated by Reference		
			Form	Filing Date	Exhibit No.
3.3	Form of Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation of Novelos Therapeutics, Inc.		S-1	July 1, 2011	3.3
10.1	Form of Common Stock Purchase Warrant dated April 8, 2011		8-K	April 11, 2011	4.3
10.2	Securities Purchase Agreement dated April 8, 2011		8-K	April 11, 2011	10.1
10.3	Placement Agency Agreement dated April 1, 2011		8-K	April 11, 2011	99.1
10.4	License Agreement between Cellectar, LLC and the Regents of the University of Michigan dated September 14, 2003, as amended through June 2010		S-1	July 1, 2011	10.31
10.5	Lease Agreement between Cellectar, LLC and McAllen Properties LLC, as amended and extended to date		S-1	July 1, 2011	10.32
10.6	Loan Agreement between the Wisconsin Department of Commerce and Cellectar, Inc. dated September 15, 2010		S-1	July 1, 2011	10.33
10.7	General Business Security Agreement dated September 15, 2010		S-1	July 1, 2011	10.34
10.8	Amended and Restated 2006 Stock Incentive Plan		8-K	May 23, 2011	10.1
10.9	Second Amendment to Employment Agreement between the Company and Harry Palmin		8-K	June 1, 2011	10.1
31.1	Certification of the chief executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of the chief financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NOVELOS THERAPEUTICS, INC.

Date: August 12, 2011

By: /s/ Harry S. Palmin
Harry S. Palmin
President and Chief Executive Officer

EXHIBIT INDEX

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Exhibit 31.1

I, HARRY S. PALMIN, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Novelos Therapeutics, Inc., a Delaware 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 (the registrant's fourth fiscal quarter in the case of an annual report) 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.

Date: August 12, 2011

/s/ Harry S. Palmin

Harry S. Palmin
President and Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

I, JOANNE M. PROTANO, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Novelos Therapeutics, Inc., a Delaware 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 (the registrant's fourth fiscal quarter in the case of an annual report) 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.

Date: August 12, 2011

/s/ Joanne M. Protano

Joanne M. Protano
Chief Financial Officer (Principal Financial and Accounting Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. § 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Novelos Therapeutics, Inc. (the "Company") for the quarter ended June 30, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Harry S. Palmin, President and Chief Executive Officer of the Company, and Joanne M. Protano, Vice President, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to our knowledge, that:

1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Harry S. Palmin
Harry S. Palmin
President, Chief Executive Officer (Principal Executive Officer)

Date: August 12, 2011

/s/ Joanne M. Protano
Joanne M. Protano
Chief Financial Officer (Principal Financial and Accounting Officer)

Date: August 12, 2011