Filed pursuant to Rule 424(b)(3)
File No. 333-185053

Prospectus Supplement No. 1
(To Prospectus dated May 9, 2013)

NOVELOS THERAPEUTICS, INC.

28,458,734 shares of common stock

This prospectus supplement supplements the Prospectus dated May 9, 2013, relating to the sale of 28,458,734 shares of common stock consisting of shares underlying warrants to purchase common stock. The underlying shares consist of warrants to purchase up to 9,248,334 shares of our common stock at an exercise price of $0.60 per share, expiring on December 6, 2016, warrants to purchase up to 2,710,400 shares of our common stock at an exercise price of $1.25 per share, expiring on June 13, 2017, warrants to purchase up to 5,500,000 shares of our common stock at an exercise price of $0.50 per share, expiring February 20, 2014, and warrants to purchase up to 11,000,000 of our common stock at an exercise price of $0.50 per share, expiring February 20, 2018. This prospectus supplement should be read in conjunction with the Prospectus.

Quarterly Report on Form 10-Q

On May 15, 2013, we filed with the Securities and Exchange Commission our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013. The text of the Form 10-Q is attached hereto.

Product Pipeline Update

On May 16, 2013, we issued a press release providing a product pipeline update. We expect to start a Phase 2 imaging trial using I-124-CLR1404 (LIGHT) positron emission tomography (PET) imaging agent in brain cancer at the beginning of 2014 and, subject to additional funding, complete the trial by the end of 2014. We completed the third cohort in a Phase 1b dose-escalation safety trial with I-131-CLR1404 (HOT) in cancer patients with advanced solid tumors and are evaluating a range of potential indications and trials designs for HOT Phase 2 clinical trials. We expect to file an Investigational New Drug Application by the end of 2013 for CLR1502 (GLOW2), our optical imaging agent for intraoperative tumor margin illumination in real-time and non-invasive tumor imaging.

Investing in our common stock involves a high degree of risk.
See Risk Factors beginning on page 6 of the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is May 15, 2013

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: March 31, 2013

☐ 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: 57,397,997 shares of common stock, $0.00001 par value per share, as of May 14, 2013.

NOVELOS THERAPEUTICS, INC.

FORM 10-Q INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

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

	March 31, 2013	December 31, 2012
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 7,862,479	$ 4,677,545
Restricted cash	55,000	55,000
Prepaid expenses and other current assets	191,844	327,393
Deferred financing	—	70,539
Total current assets	8,109,323	5,130,477
RESTRICTED CASH	1,878,260	2,000,000
FIXED ASSETS, NET	2,621,593	2,645,003
GOODWILL	1,675,462	1,675,462
OTHER ASSETS	27,222	27,222
TOTAL ASSETS	$ 14,311,860	$ 11,478,164
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	$ 862,989	$ 716,990
Derivative liability	5,727,261	13,304
Capital lease obligations, current portion	2,439	2,397
Total current liabilities	6,592,689	732,691
LONG-TERM LIABILITIES:		
Notes payable	450,000	450,000
Deferred rent	137,599	135,404
Capital lease obligations, net of current portion	1,068	1,694
Total long-term liabilities	588,667	587,098
TOTAL LIABILITIES	7,181,356	1,319,789
CONTINGENCIES (Note 7)		
STOCKHOLDERS' EQUITY:		
Preferred stock, $0.00001 par value; 7,000 shares authorized; none issued and outstanding as of March 31, 2013 and December 31, 2012	—	—
Common stock, $0.00001 par value; 150,000,000 shares authorized; 57,397,997 and 46,397,997 shares issued and outstanding at March 31, 2013 and December 31, 2012, respectively	574	464
Additional paid-in capital	50,861,209	50,435,311
Deficit accumulated during the development stage	(43,731,279)	(40,277,400)
Total stockholders' equity	7,130,504	10,158,375
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 14,311,860	$ 11,478,164

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 March 31,		Cumulative Development-Stage Period from November 7, 2002 (date of inception) through March 31,
	2013	2012	2013
COSTS AND EXPENSES:			
Research and development	$ 1,590,613	$ 1,328,314	$ 27,518,338
General and administrative	1,121,703	997,671	14,416,413
Merger costs	—	—	799,133
Total costs and expenses	2,712,316	2,325,985	42,733,884
LOSS FROM OPERATIONS	(2,712,316)	(2,325,985)	(42,733,884)
OTHER INCOME (EXPENSE):			
Grant income	—	—	244,479
Gain/(loss) on revaluation of derivative warrants	6,043	(28,846)	(39,969)
Loss on issuance of derivative warrants	(744,957)	—	(744,957)
Interest expense, net	(2,649)	(2,072)	(458,109)
Other income	—	—	1,161
Total other expense, net	(741,563)	(30,918)	(997,395)
NET LOSS	(3,453,879)	(2,356,903)	(43,731,279)
DEEMED DIVIDEND ON WARRANTS	—	—	(543,359)
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS	$ (3,453,879)	$ (2,356,903)	$ (44,274,638)
BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	$ (0.07)	$ (0.06)	$ (2.97)
SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	51,286,886	36,910,217	14,923,994

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

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

	Three Months Ended March 31,		Cumulative Development-Stage Period from November 7, 2002 through March 31,
	2013	2012	2013
Net loss	$ (3,453,879)	$ (2,356,903)	$ (43,731,279)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	111,874	139,771	3,025,165
Stock-based compensation	425,898	417,353	4,784,068
Intrinsic value of beneficial conversion feature associated with convertible debt	—	—	471,765
Issuance of stock for technology and services	—	—	89,520
Impairment of intangible assets	—	—	19,671
Loss on disposal of fixed assets	4,513	—	40,990
(Gain) loss on revaluation of derivative warrants	(6,043)	28,846	39,969
Loss on issuance of derivative warrants	744,957	—	744,957
Changes in:			
Prepaid expenses and other current assets	135,549	71,667	(175,674)
Accounts payable and accrued liabilities	145,999	(6,412)	482,860
Accrued interest	—	—	463,722
Deferred rent	2,195	2,987	137,599
Cash used in operating activities	(1,888,937)	(1,702,691)	(33,606,667)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Cash acquired in a business combination	—	—	905,649
Purchases of fixed assets	(92,977)	(15,149)	(5,677,260)
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	121,740	—	(1,933,260)
Payment for intangible assets	—	—	(19,671)
Cash provided by (used in) investing activities	28,763	(15,149)	(6,717,542)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of convertible notes	—	—	2,720,985
Proceeds from long-term obligations	—	—	1,677,945
Payments on long-term obligations	—	—	(1,227,944)
Payments on capital lease obligations	(584)	(544)	(7,467)
Proceeds from issuance of common stock, net of issuance costs	4,975,153	—	43,688,181
Proceeds from exercise of warrants	—	—	1,338,300
Repurchase of common stock	—	—	(31,667)
Cash in lieu of fractional shares in a business combination	—	—	(145)
Change in deferred issuance costs	70,539	—	28,500
Cash provided by (used in) financing activities	5,045,108	(544)	48,186,688
INCREASE (DECREASE) IN CASH AND EQUIVALENTS	3,184,934	(1,718,384)	7,862,479
CASH AND EQUIVALENTS AT BEGINNING OF PERIOD	4,677,545	5,505,960	—
CASH AND EQUIVALENTS AT END OF PERIOD	$ 7,862,479	$ 3,787,576	$ 7,862,479
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Fair value of warrants classified as derivative liability	$ 5,720,000	$ —	$ 5,720,000
Interest paid	$ —	$ —	$ 208,689
Fair value of derivative warrants reclassified to equity upon cashless exercise	$ —	$ 19,754	$ 92,194
Issuance of common stock in connection with the conversion of notes payable and $463,722 in accrued interest	$ —	$ —	$ 3,184,707
Fair value of assets acquired in exchange for securities in a business combination	$ —	$ —	$ 78,408
Fair value of liabilities assumed in exchange for securities in a business combination	$ —	$ —	$ (439,616)
Goodwill resulting from business combination	$ —	$ —	$ 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 (UNAUDITED)

1. NATURE OF BUSINESS, ORGANIZATION AND GOING CONCERN

Novelos Therapeutics, Inc. ("Novelos" or the "Company") is a pharmaceutical company developing novel drugs for the treatment and diagnosis of cancer.

The Company is subject to a number of risks similar to those of other small pharmaceutical 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 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 $43,731,279 at March 31, 2013. During the three months ended March 31, 2013, the Company generated a net loss of $3,453,879 and the Company expects that it will continue to generate operating losses for the foreseeable future. The Company believes that its cash balance at March 31, 2013 is adequate to fund operations at budgeted levels through the end of 2013. The cash balance at March 31, 2013 excludes approximately $1,878,000 contractually designated for use towards the $3,000,000 estimated cost of construction of an in-house manufacturing facility for the Company's LIGHT compound. As an alternative to this project, the Company is evaluating contract manufacturers that may accommodate larger scale production of LIGHT. The Company's ability to execute its operating plan beyond the end of 2013 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 financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The accompanying balance sheet as of December 31, 2012 has been derived from audited financial statements. The accompanying unaudited consolidated balance sheet as of March 31, 2013, the consolidated statements of operations for the three months ended March 31, 2013 and 2012 and the cumulative period November 7, 2002 (date of inception) through March 31, 2013, and the consolidated statements of cash flows for the three months ended March 31, 2013 and 2012 and the cumulative period November 7, 2002 (date of inception) through March 31, 2013 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 March 31, 2013 and consolidated results of its operations and its cash flows for the three months ended March 31, 2013 and 2012 and the period from November 7, 2002 (inception) to March 31, 2013. The results for the three months ended March 31, 2013 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 10-K, which was filed with the SEC on March 28, 2013.

Principles of Consolidation — The consolidated financial statements include the accounts of the Company and the accounts of its wholly-owned subsidiary. All intercompany accounts and transactions have been eliminated in consolidation.

Restricted Cash — The Company accounts for cash that is restricted for other than current operations as restricted cash. Restricted cash (current) at March 31, 2013 consists of a certificate of deposit of $55,000 required under the Company's lease agreement for its Madison, Wisconsin facility. Restricted cash (non-current) includes $1,878,260 of cash that has been contractually designated for use towards the construction of a clinical-stage manufacturing facility for LIGHT at the Company's Madison, WI location.

Deferred Financing Costs — Incremental direct costs associated with the issuance of the Company's common stock are deferred and are recognized as a reduction of the gross proceeds upon completion of the related equity transaction. In the event that the equity transaction is not probable or is aborted, the Company expenses such costs. There were no deferred financing costs as of March 31, 2013. At December 31, 2012, the Company had recorded $70,539 of costs in connection with a public offering of stock. During the three months ended March 31, 2013, upon the completion of the associated equity transaction, the deferred costs were offset against the gross proceeds received (see Note 3).

Goodwill — Intangible assets at March 31, 2013 consist of goodwill recorded in connection with 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 (the Acquisition). Goodwill is not amortized, but is required to be evaluated for impairment annually or whenever events or changes in circumstances suggest that the carrying value of an asset may not be recoverable. The Company evaluates goodwill for impairment annually in the fourth fiscal quarter and additionally on an interim basis if an event occurs or there is a change in circumstances, such as a decline in the Company's stock price or a material adverse change in the business climate, which would more likely than not reduce the fair value of the reporting unit below its carrying amount. There were no changes in goodwill during the three months ended March 31, 2013.

Stock-Based Compensation — The Company uses the Black-Scholes option-pricing model to calculate the grant-date fair value of stock option awards. The resulting compensation expense, net of expected forfeitures, for awards that are not performance-based is recognized on a straight-line basis over the service period of the award, which is generally three years for stock options. For stock options with performance-based vesting provisions, recognition of compensation expense, net of expected forfeitures, commences if and when the achievement of the performance criteria is deemed probable. The compensation expense, net of expected forfeitures, for performance-based stock options is recognized over the relevant performance period. Non-employee stock-based compensation is accounted for in accordance with the guidance of Topic 505, *Equity* of the Financial Accounting Standards Board Accounting Standards Codification ("FASB ASC"). As such, the Company recognizes expense based on the estimated fair value of options granted to non-employees over their vesting period, which is generally the period during which services are rendered and deemed completed by such non-employees.

Fair Value of Financial Instruments — The guidance under FASB ASC Topic 825, *Financial Instruments*, requires disclosure of the fair value of certain financial instruments. Financial instruments in the accompanying financial statements consist of cash equivalents, accounts payable and long-term obligations. The carrying amount of cash equivalents and accounts payable approximate their fair value due to their short-term nature. The carrying value of long-term obligations, including the current portion, approximates fair value because the fixed interest rate approximates current market interest rates available on similar instruments.

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 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 16,527,310 and 27,310 at March 31, 2013 and December 31, 2012, respectively. 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 on the consolidated statements of operations in each reporting period. If these instruments subsequently meet the requirements for equity classification, the Company reclassifies the fair value to equity. At March 31, 2013 and December 31, 2012, these warrants represented the only outstanding derivative instruments issued or held by the Company.

2. FAIR VALUE

In accordance with Fair Value Measurements and Disclosures Topic of the FASB ASC 820, 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:

	March 31, 2013			
	Level 1	Level 2	Level 3	Fair Value
Liabilities:				
Warrants	$ -	$ 5,727,261	$ -	$ 5,727,261

	December 31, 2012			
	Level 1	Level 2	Level 3	Fair Value
Liabilities:				
Warrants	$ -	$ 13,304	$ -	$ 13,304

The Company uses a modified option-pricing model and assumptions that consider, among other variables, the fair value of the underlying stock, risk-free interest rates ranging from 0.16% to 0.88%, volatility ranging from 85% to 115%, the contractual term of the warrants ranging from 1-5 years, future financing requirements and dividend rates in estimating fair value for the warrants considered to be derivative instruments.

3. STOCKHOLDERS' EQUITY

February 2013 Public Offering

On February 20, 2013, pursuant to securities purchase agreements entered into with investors on February 12, 2013, the Company completed a registered public offering of an aggregate of 11,000,000 shares of its common stock, warrants to purchase up to an aggregate of 11,000,000 shares of our common stock at an exercise price of $0.50 per share which will be exercisable for five years from issuance, and warrants to purchase up to an aggregate of 5,500,000 shares of our common stock at an exercise price of $0.50 per share which will be exercisable for one year from issuance, for gross proceeds of $5,500,000 and net proceeds of $4,975,153 after deducting transaction costs, which include placement agent fees and legal and accounting costs associated with the offering (the "February Offering"). The warrant exercise price and the common stock issuable pursuant to such warrants are subject to adjustment for stock dividends, stock splits and similar capital reorganizations, in which event the rights of the warrant holders would be adjusted as necessary so that they would be equivalent to the rights of the warrant holders prior to such event. The exercise price of the warrants is also subject to adjustment for dilutive issuances. The warrants did not meet the criteria for equity classification as a result of the down-round protection. Accordingly the fair value of $5,720,000 was recorded as a derivative liability during the three months ended March 31, 2013. The fair value upon issuance exceeded the net proceeds received in the offering. The excess of $744,957, after allocation of par value, was recorded as a loss on issuance of derivative warrants on the Company's consolidated statement of operations for the three months ended March 31, 2013. The Company utilized a modified option pricing model to determine the fair value of the warrants (see Note 2). In the February Offering, the Company paid a cash fee of $385,000 and issued warrants to purchase 770,000 shares of its common stock at an exercise price of $0.625 per share expiring on February 4, 2018 to the placement agent. The placement agent warrants do not contain down-round protection.

Common Stock Warrants

The following table summarizes information with regard to outstanding warrants to purchase common stock as of March 31, 2013.

Offering	Number of Shares Issuable Upon Exercise of Outstanding Warrants		Exercise Price	Expiration Date
February 2013 Public Offering (1)	11,000,000	$	0.50	February 20, 2018
February 2013 Public Offering (1)	5,500,000	$	0.50	February 20, 2014
February 2013 Public Offering – Placement Agents	770,000	$	0.625	February 4, 2018
November 2012 Private Placement	1,000,000	$	1.25	November 2, 2017
June 2012 Public Offering	2,981,440	$	1.25	June 13, 2017
December 2011 Underwritten Offering	9,248,334	$	0.60	December 6, 2016
April 2011 Private Placement	6,058,811	$	0.75	March 31, 2016
Legacy warrants (1)	27,310	$	0.50	July 27, 2015
Legacy warrants	105,040	$	16.065	July 27, 2015
Legacy warrants	91,524	$	99.45-100.98	December 31, 2015
Total	36,782,459			

(1) The exercise prices of these warrants are subject to adjustment for "down-rounds" and have been accounted for as derivative instruments as described in Note 2.

On January 31, 2013, warrants to purchase 2,000,000 shares of common stock at an exercise price of $1.00 per share expired unexercised.

4. STOCK-BASED COMPENSATION

Accounting for Stock-Based Compensation

The Company uses the Black-Scholes option-pricing model to calculate the grant-date fair value of stock option awards. The resulting compensation expense, net of expected forfeitures, for non-performance based awards is recognized on a straight-line basis over the service period of the award, which is generally three years for stock options. For stock options with performance-based vesting provisions, recognition of compensation expense, net of expected forfeitures, commences if and when the achievement of the performance criteria is deemed probable. The compensation expense, net of expected forfeitures, for performance-based stock options is recognized over the relevant performance period. Evaluation of the probability of meeting performance targets is evaluated at the end of each reporting period. Non-employee stock-based compensation is accounted for in accordance with the guidance of FASB ASC Topic 505, *Equity.* As such, the Company recognizes expense based on the estimated fair value of options granted to non-employees over their vesting period, which is generally the period during which services are rendered and deemed completed by such non-employees.

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:

	Three Months Ended March 31,		Cumulative Development Stage Period from November 7, 2002 through March 31,
	2013	2012	2013
Employee and director stock option grants:			
Research and development	$ 105,838	$ 78,044	$ 914,099
General and administrative	312,039	248,968	3,470,831
	417,877	327,012	4,384,930
Non-employee consultant stock option grants:			
Research and development	1,011	47,014	117,047
General and administrative	7,010	43,327	282,091
	8,021	90,341	399,138
Total stock-based compensation	$ 425,898	$ 417,353	$ 4,784,068

During the year ended December 31, 2012, the Company granted options to purchase 167,550 shares of common stock pursuant to performance-based awards to an employee. No compensation expense was recognized related to the performance-based awards as the award was forfeited in January 2013 when the milestones were not met.

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

	Three Months Ended March 31, 2013
Volatility	109%
Risk-free interest rate	0.915%
Expected life (years)	6.0
Dividend	0%
Weighted-average exercise price	$ 0.74
Weighted-average grant-date fair value	$ 0.61

The Company granted 20,000 stock options to an employee during the three months ended March 31, 2013 under the Company's 2006 Stock Incentive Plan. The exercise price for the grant made during the three months ended March 31, 2013 was equal to the market value of the Company's common stock on the date of grant. There were no stock options granted in the three months ended March 31, 2012.

Stock Option Activity

A summary of stock option activity under stock option plans 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, 2012	6,439,188	$ 1.52		
Granted	20,000	$ 0.74		
Forfeited	(167,550)	$ 0.75		
Outstanding at March 31, 2013	6,291,638	$ 1.54		
Vested, March 31, 2013	2,884,651	$ 2.33	8.32	$ 6,824
Unvested, March 31, 2013	3,406,987	$ 0.88	9.02	$ 7,677
Exercisable at March 31, 2013	2,884,651	$ 2.33	8.32	$ 6,824

The aggregate intrinsic value of options outstanding is calculated based on the positive difference between the estimated per-share fair value of common stock at the end of the respective period and the exercise price of the underlying options. There have been no option exercises to date. Shares of common stock issued upon the exercise of options are from authorized but unissued shares.

As of March 31, 2013, there was $2,289,665 of total unrecognized compensation cost related to unvested stock-based compensation arrangements. Of this total amount, the Company expects to recognize $1,006,355, $873,638, $359,824 and $49,848 during 2013, 2014, 2015 and 2016, respectively. The Company expects 3,406,987 in unvested options to vest in the future. The weighted-average grant-date fair value of vested and unvested options outstanding at March 31, 2013 was $0.98 and $0.73, respectively.

5. INCOME TAXES

The Company accounts for income taxes in accordance with the liability method of accounting. 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 months ended March 31, 2013 or 2012 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.

The Company also accounts for the uncertainty in income taxes related to the recognition and measurement of a tax position taken or expected to be taken in an income tax return. The Company follows the applicable accounting guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition related to the uncertainty in income tax positions. No uncertain tax positions have been identified.

6. NET LOSS PER SHARE

Basic net loss per share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing net loss, as adjusted, by the sum of the weighted average number of shares of common stock and the dilutive potential common stock equivalents then outstanding. Potential common stock equivalents consist of stock options and warrants. Since there is a net loss attributable to common stockholders for the three months ended March 31, 2013 and 2012, the inclusion of common stock equivalents in the computation for those periods would be antidilutive. Accordingly, basic and diluted net loss per share is the same for all periods presented.

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 March 31,		Cumulative Development- Stage Period from November 7, 2002 (inception) through March 31,
	2013	2012	2013
Warrants	36,782,459	17,176,679	36,782,459
Stock options	6,291,638	4,827,638	6,291,638

7. CONTINGENCIES

Litigation

The Company is party to the following legal matter.

BAM Dispute

From its inception through 2010, Novelos was primarily engaged in the development of certain oxidized glutathione-based compounds for application as therapies for disease, particularly cancer. These compounds were originally developed in Russia and in June 2000, Novelos acquired commercial rights from the Russian company ("ZAO BAM") which owned the compounds and related Russian patents. In April 2005, Novelos acquired worldwide rights to the compounds (except for the Russian Federation) in connection with undertaking extensive development activities in an attempt to secure US Food and Drug Administration ("FDA") approval of the compounds as therapies. These development activities culminated in early 2010 in an unsuccessful Phase 3 clinical trial of an oxidized glutathione compound (NOV-002) as a therapy for non-small cell lung cancer. After the disclosure of the negative outcome of the Phase 3 clinical trial in 2010, ZAO BAM claimed that Novelos modified the chemical composition of NOV-002 without prior notice to or approval from ZAO BAM, constituting a material breach of the June 2000 technology and assignment agreement. In September 2010, Novelos filed a complaint in Massachusetts Superior Court seeking a declaratory judgment by the court that the June 2000 agreement has been entirely superseded by the April 2005 agreement and that the obligations of the June 2000 agreement have been performed and fully satisfied. ZAO BAM answered the complaint and alleged counterclaims. In August 2011, Novelos filed a motion for judgment on the pleadings as to the declaratory judgment count and all counts of ZAO BAM's amended counterclaims. On October 17, 2011, the court ruled in favor of Novelos on each of the declaratory judgment claims and dismissed all counts of ZAO BAM's counterclaim. Judgment in favor of Novelos was entered on October 20, 2011. On November 14, 2011 ZAO BAM filed a notice of appeal.

We do not anticipate that this litigation matter will have a material adverse effect on the Company's future financial position, results of operations or cash flows.

8. RELATED PARTY TRANSACTIONS

Jamey Weichert, the Company's Chief Scientific Officer and principal founder of Cellectar, and a director and shareholder of the Company, is a faculty member at the University of Wisconsin-Madison ("UW"). During the three months ended March 31, 2013, the Company made contributions to UW totaling $62,500 for use towards unrestricted research activities. No payments were made to UW for costs associated with clinical trial and other research agreements during the three months ended March 31, 2013. The Company made contributions to UW of $81,500 for use towards unrestricted research activities and paid UW $92,754 for costs associated with clinical trial agreements during the three months ended March 31, 2012.

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.

Overview

We are a pharmaceutical company developing novel drugs for the treatment and diagnosis of cancer. Our cancer-targeted compounds are selectively taken up and retained in cancer cells, including cancer stem cells, versus normal cells. I-124-CLR1404 (LIGHT) is a small-molecule, broad-spectrum, cancer-targeted PET imaging agent. LIGHT Phase 1-2 clinical trials are ongoing across 11 solid tumor indications. I-131-CLR1404 (HOT) is a small-molecule, broad-spectrum, cancer-targeted molecular radiotherapeutic that delivers cytotoxic radiation directly and selectively to cancer cells and cancer stem cells. HOT Phase 1b dose-escalation trial is ongoing in patients with advanced solid tumors. CLR1502 (GLOW2) is a preclinical, cancer-targeted, non-radioactive optical imaging agent for intraoperative tumor margin illumination and non-invasive tumor imaging. Together, we believe our compounds are able to "find, treat and follow" cancer anywhere in the body in a novel, effective and highly selective way.

LIGHT is a small-molecule, broad-spectrum, cancer-targeted imaging agent that we believe has the potential to be the first of its kind for selective detection of tumors and metastases in a broad range of cancers. LIGHT is comprised of a proprietary PLE, acting as a cancer-targeted delivery and retention vehicle, covalently labeled with iodine-124, a short-lived PET imaging radioisotope. 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 broad-spectrum, cancer-selective uptake and retention. Investigator-sponsored Phase 1-2 trials of LIGHT as a PET imaging agent are ongoing across 11 solid tumor indications. Initial positive imaging results have been established in patients with lung and brain cancers. These human trials, if successful, would likely provide proof-of-concept for LIGHT as a PET imaging agent with the potential to supplant the current "gold standard" agents, 18F-fluoro-deoxyglucose (FDG) for various solid tumors or MRI in the case of brain cancers, due to what we believe to be LIGHT's superior cancer-specificity versus FDG and MRI, and more favorable logistics of clinical use versus FDG. As a chemically identical biomarker for HOT, we believe that LIGHT tumor uptake data could accelerate clinical development of HOT by guiding selection of indications for HOT Phase 2 trials and potentially be used in such trials to identify suitable patients and assess therapeutic efficacy.

HOT is a small-molecule, broad-spectrum, cancer-targeted molecular radiotherapeutic that we believe has the potential to be the first therapeutic agent to use PLEs to target cancer cells. HOT is comprised of a proprietary PLE, acting as a cancer-targeted delivery and retention vehicle, covalently labeled with iodine-131, a cytotoxic (cell-killing) radioisotope that is already in common use to treat thyroid and other cancer types. The ongoing Phase 1b dose-escalation trial is aimed at determining the Maximum Tolerated Dose of HOT. The Phase 1b trial data will be instrumental in evaluating a range of potential Phase 2 trial designs for HOT, including incorporation of multiple dosing as well as combination of HOT with external beam radiotherapy or with radiosensitizing therapeutics. Selection of indications for Phase 2, as well as aspects of trial design, will be guided by ongoing PET imaging trials in cancer patients with LIGHT, a chemically identical biomarker for HOT. Preclinical experiments in more than a dozen *in vivo* (in animals) tumor models have demonstrated selective killing of cancer cells along with a benign safety profile.

GLOW2 is a small-molecule, broad-spectrum, cancer-targeted, non-radioactive optical imaging agent that we believe has the potential to be the first of its kind for intraoperative tumor margin illumination and non-invasive tumor imaging. GLOW2 is comprised of a proprietary PLE, acting as a cancer-targeted delivery and retention vehicle, covalently attached to a near-infrared (800nm) fluorophore. According to the American Cancer Society (2011), most cancer patients will have some type of surgery, and Cancer Facts and Figures indicated that approximately 1.3 million cancer patients were diagnosed with solid tumors in the U.S. alone in 2011. GLOW2 may facilitate and enable diagnostic, staging, debulking and curative cancer surgeries, intraoperatively in real time (i.e., during the actual surgical procedure) by defining tumor margins and regional lymph node involvement, resulting in more accurate tumor resectioning and improved outcome and prognosis. In this context, GLOW2 would effectively act as an adjunct therapeutic agent. In preclinical *in vivo* (in animals) tumor models, non-invasive optical imaging showed pronounced accumulation of GLOW2 in tumors versus normal organs and tissues in addition to successfully delineated tumor margins during tumor resection. Thus, GLOW2 may also have utility for non-invasive imaging of relatively superficial tumor types in man (e.g., melanoma, head & neck, colon, esophageal). We expect to submit an IND for GLOW2 in the fourth quarter of 2013 and begin clinical trials shortly thereafter.

Results of Operations

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, 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 company reporting and investor relations, directors' fees and professional fees for legal and accounting services.

Three Months Ended March 31, 2013 and 2012

Research and Development. Research and development expense for the three months ended March 31, 2013 was approximately $1,591,000 (comprised of $126,000 in clinical project costs, $95,000 of preclinical project costs, $215,000 of manufacturing and related costs and $1,155,000 in general unallocated research and development costs) compared to approximately $1,328,000 (comprised of $254,000 in clinical project costs, $70,000 in preclinical project costs, $62,000 in manufacturing and related costs, and $942,000 in general unallocated research and development costs) for the three months ended March 31, 2012. The $263,000, or 20%, increase in research and development expense resulted from increases in several categories. The $128,000 decrease in clinical project costs was primarily the result of a reduction in trial start-up costs in the three months ended March 31, 2013 versus the same period in 2012. The $153,000 increase in chemistry, manufacturing and related costs in the three months ended March 31, 2013 versus 2012 was related to costs associated with the ongoing Phase 1-2 trials for LIGHT and the Phase 1b trial for HOT, as well as costs associated with the evaluation of contract manufacturing alternatives for LIGHT. The $25,000 increase in preclinical costs for the three months ended March 31, 2013 versus 2012 was related to consulting costs to support preclinical research efforts. The $213,000 increase in general unallocated research and development costs for the three months ended March 31, 2013 versus 2012 was primarily related to an approximately $137,000 increase in payroll related costs and approximately $70,000 related to costs incurred in connection with the evaluation of the LIGHT manufacturing build-out.

General and Administrative. General and administrative expense for the three months ended March 31, 2013 was approximately $1,122,000 compared to approximately $998,000 in the three months ended March 31, 2012. The approximately $124,000, or 12%, increase is related primarily to increased consulting, insurance costs, directors' fees and travel costs.

Gain/Loss on Revaluation of Derivative Warrants. We recorded a gain on derivative warrants of approximately $6,000 in the three months ended March 31, 2013 and a loss on derivative warrants of approximately $29,000 in the three months ended March 31, 2012. These amounts represent 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.

Loss on Issuance of Derivative Warrants. Loss on derivative warrants of approximately $745,000 was recorded in the three months ended March 31, 2013 and represents the amount by which the initial fair value of warrants issued in connection with the February Offering (Note 3) exceeded the net proceeds received from the offering. These warrants are classified as derivative liabilities because they include "down-round" anti-dilution protection. We had no such expense in the three months ended March 31, 2012.

Interest expense, net. Interest expense, net for the three months ended March 31, 2013 and 2012 consists of interest related to the Company's outstanding debt owed to the Wisconsin Department of Commerce and was consistent on a comparative basis.

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 $126 million. Novelos has raised capital aggregating approximately $99 million. As of March 31, 2013, we had approximately $7,862,000 in cash and cash equivalents, which excludes $1,878,260 classified as restricted cash that is contractually designated towards the construction of a clinical-stage manufacturing facility for LIGHT at our Madison, WI location.

During the three months ended March 31, 2013, approximately $1,889,000 in cash was used in operations. During this period we reported a net loss of approximately $3,454,000. However, this loss included the following non-cash items: an approximately $745,000 loss on the issuance of derivative warrants, an approximately $6,000 gain on the revaluation of derivative warrants, an approximately $426,000 in stock-based compensation expense, an approximately $112,000 in expense related to depreciation and amortization and an approximately $5,000 loss on the disposal of fixed assets. After adjustment for these non-cash items, the Company utilized approximately $136,000 in cash for the prepayment of certain items. Other changes in working capital provided cash of $148,000.

During the three months ended March 31, 2013, we purchased approximately $93,000 in fixed assets and utilized approximately $122,000 of restricted cash from the November 2012 private placement for evaluation of the construction of an in-house manufacturing facility for our LIGHT compound. We are not currently pursuing the construction project and are evaluating contract manufacturers that may accommodate larger scale production of LIGHT.

In February 2013, we completed a public offering of our common stock and warrants for net proceeds of approximately $4,975,000.

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 approximately $43,731,000 at March 31, 2013. During the three months ended March 31, 2013, we generated a net loss of approximately $3,454,000 and we expect that we will continue to generate operating losses for the foreseeable future. At March 31, 2013, our consolidated cash balance, excluding the funds designated for use in the construction project, was approximately $7,862,000. We believe this cash balance is adequate to fund operations through the end of 2013. 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. We have, in the past, successfully completed multiple rounds of financings, but, due to market conditions and other factors, including our development stage, the proceeds we have been able to secure have been less than the amounts we sought to obtain. We plan to actively pursue all available financing alternatives; however, we have not entered into negotiations for any such transactions and 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 March 31, 2013. 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 March 31, 2013 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

The Company's management, in connection with its evaluation of internal controls (with the participation of the Company's principal executive officer and principal financial officer), did not identify any change in internal control over the financial reporting process that occurred during the Company's first quarter of 2013 that would have materially affected, or would have been 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

From its inception through 2010, Novelos was primarily engaged in the development of certain oxidized glutathione-based compounds for application as therapies for disease, particularly cancer. These compounds were originally developed in Russia and in June 2000, Novelos acquired commercial rights from the Russian company ("ZAO BAM") which owned the compounds and related Russian patents. In April 2005, Novelos acquired worldwide rights to the compounds (except for the Russian Federation) in connection with undertaking extensive development activities in an attempt to secure US Food and Drug Administration ("FDA") approval of the compounds as therapies. These development activities culminated in early 2010 in an unsuccessful Phase 3 clinical trial of an oxidized glutathione compound (NOV-002) as a therapy for non-small cell lung cancer. After the disclosure of the negative outcome of the Phase 3 clinical trial in 2010, ZAO BAM claimed that Novelos modified the chemical composition of NOV-002 without prior notice to or approval from ZAO BAM, constituting a material breach of the June 2000 technology and assignment agreement. In September 2010, Novelos filed a complaint in Massachusetts Superior Court seeking a declaratory judgment by the court that the June 2000 agreement has been entirely superseded by the April 2005 agreement and that the obligations of the June 2000 agreement have been performed and fully satisfied. ZAO BAM answered the complaint and alleged counterclaims. In August 2011, Novelos filed a motion for judgment on the pleadings as to the declaratory judgment count and all counts of ZAO BAM's amended counterclaims. On October 17, 2011, the court ruled in favor of Novelos on each of the declaratory judgment claims and dismissed all counts of ZAO BAM's counterclaim. Judgment in favor of Novelos was entered on October 20, 2011. On November 14, 2011 ZAO BAM filed a notice of appeal.

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 March 31, 2013, our consolidated cash balance was approximately $7,862,000. We believe our cash balance at March 31, 2013 is adequate to fund operations through the end of 2013. This aggregate cash balance excludes $1,878,000 classified as restricted cash that is contractually designated for the construction of a clinical-stage manufacturing facility for LIGHT at our Madison, WI location, estimated to cost a total of $3,000,000. We will require additional funds to conduct research and development, establish and conduct clinical and preclinical trials, establish commercial-scale manufacturing arrangements and provide for the marketing and distribution of our products. Our ability to execute our operating plan depends on our ability to obtain additional funding via the sale of equity and/or debt securities, a strategic transaction or otherwise. We plan to actively pursue financing alternatives. However, there can be no assurance that we will obtain the necessary funding in the amounts we seek 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 preclinical 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;

- whether or not we obtain listing on a national exchange and, if not, our prospects for obtaining such listing;
- 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 that will generate product or licensing revenues. We do not expect to have any 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 preclinical 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. Whether we achieve profitability or not will depend on our success in developing, manufacturing, and marketing our product candidates. We have experienced net losses and negative cash flows from operating activities since inception and we expect such losses and negative cash flows to continue for the foreseeable future. As of March 31, 2013, we had working capital of $1,516,634 and stockholders' equity of $7,130,504. For the period from Cellectar's inception in November 2002 until the business combination with Novelos on April 8, 2011, and thereafter through March 31, 2013, Cellectar (and, from and after the business combination, Novelos) incurred aggregated net losses of $43,731,279. The net loss for the year ended March 31, 2013 was $3,453,879. We may never achieve profitability.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosure

None.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description	Filed with this Form 10-K	Incorporation by Reference		
			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
4.1	Form of common stock certificate		S-1/A	November 9, 2011	4.1
10.1	Amended and Restated Placement Agent Agreement dated January 8, 2013 between the Company and Burrill LLC		S-1/A	January 31, 2013	10.37
10.2	Form of Securities Purchase Agreement		8-K	February 14, 2013	10.1
10.3	Form of Common Stock Purchase Warrant		8-K	February 14, 2013	10.2
31.1	Certification of chief executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of chief financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certification of chief executive officer and chief financial officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
101	Interactive Data Files	X			