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, 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 May 10, 2011.

NOVELOS THERAPEUTICS, INC.

FORM 10-Q INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

NOVELOS THERAPEUTICS, INC.
BALANCE SHEETS

	March 31, 2011 (unaudited)	December 31, 2010
ASSETS		
CURRENT ASSETS:		
Cash and equivalents	$ 1,030,942	$ 2,372,951
Prepaid expenses and other current assets	28,042	63,526
Deferred transaction costs	28,500	—
Total current assets	1,087,484	2,436,477
FIXED ASSETS, NET	6,515	8,755
DEPOSITS	15,350	15,350
TOTAL ASSETS	$ 1,109,349	$ 2,460,582
LIABILITIES, REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	$ 250,008	$ 565,723
Derivative liability (see Note 2)	162,760	288,250
Deferred revenue – current	33,333	33,333
Total current liabilities	446,101	887,306
DEFERRED REVENUE – NONCURRENT	358,333	366,667
COMMITMENTS AND CONTINGENCIES		
REDEEMABLE PREFERRED STOCK:		
Series E convertible preferred stock, $0.00001 par value; 735 shares designated, 0 shares issued and outstanding at March 31, 2011 and December 31, 2010	—	—
STOCKHOLDERS' EQUITY:		
Preferred Stock, $0.00001 par value; 7,000 shares authorized: Series C 8% cumulative convertible preferred stock; 272 shares designated, 0 shares issued and outstanding at March 31, 2011 and December 31, 2010.	—	—
Common stock, $0.00001 par value; 150,000,000 shares authorized; 2,959,871 shares issued and outstanding at March 31, 2011 and December 31, 2010, respectively	30	30
Additional paid-in capital	75,291,653	75,183,275
Accumulated deficit	(74,986,768)	(73,976,696)
Total stockholders' equity	304,915	1,206,609
TOTAL LIABILITIES, REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY	$ 1,109,349	$ 2,460,582

See notes to financial statements.

Share totals give retroactive effect to the 1-for-153 reverse split of our common stock completed on April 8, 2011.

NOVELOS THERAPEUTICS, INC.
STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended March 31,	
	2011	**2010**
REVENUE	$ 8,333	$ 8,333
COSTS AND EXPENSES:		
Research and development	532,686	1,910,889
General and administrative	611,877	644,763
Total costs and expenses	1,144,563	2,555,652
LOSS FROM OPERATIONS	(1,136,230)	(2,547,319)
OTHER INCOME:		
Interest income	668	—
Gain on derivative warrants (see Note 2)	125,490	7,897,441
Total other income	126,158	7,897,441
NET INCOME (LOSS)	(1,010,072)	5,350,122
PREFERRED STOCK DIVIDENDS	—	(656,635)
NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS	$ (1,010,072)	$ 4,693,487
BASIC NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	$ (0.34)	$ 8.99
SHARES USED IN COMPUTING BASIC NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	2,959,871	522,350
DILUTED NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	$ (0.34)	$ 3.41
SHARES USED IN COMPUTING DILUTED NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	2,959,871	881,861

See notes to financial statements.

Share totals and share-based calculations give retroactive effect to the 1-for-153 reverse split of our common stock completed on April 8, 2011.

NOVELOS THERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS
(Unaudited)

	Three Months Ended March 31,	
	2011	**2010**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	$ (1,010,072)	$ 5,350,122
Adjustments to reconcile net income (loss) to cash used in operating activities:		
Depreciation and amortization	2,240	27,290
Stock-based compensation	108,378	(97,479)
Gain on derivative warrants	(125,490)	(7,897,441)
Changes in:		
Prepaid expenses and other current assets	35,483	(47,574)
Accounts payable and accrued liabilities	(315,715)	(403,760)
Accrued compensation	—	(238,022)
Deferred revenue	(8,333)	(8,333)
Cash used in operating activities	(1,313,509)	(3,315,197)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Deferred financing costs	(28,500)	—
Proceeds from exercise of stock options	—	157,400
Cash provided by financing activities	(28,500)	157,400
DECREASE IN CASH AND EQUIVALENTS	(1,342,009)	(3,157,797)
CASH AND EQUIVALENTS AT BEGINNING OF PERIOD	2,372,951	8,769,529
CASH AND EQUIVALENTS AT END OF PERIOD	$ 1,030,942	$ 5,611,732
SUPPLEMENTAL DISCLOSURES OF NON-CASH FINANCING ACTIVITIES		
Dividends accumulated on shares of Series E preferred stock exchanged or converted into shares of common stock	$ —	$ 634,925
Fair value of derivative warrants reclassified to additional paid-in capital upon cashless exercise	$ —	$ 2,584,397
Carrying value of redeemable preferred stock converted into common stock	$ —	$ 4,689,593

See notes to financial statements.

Novelos Therapeutics, Inc.
Notes to Financial Statements

1. NATURE OF BUSINESS, BASIS OF PRESENTATION

Novelos Therapeutics, Inc. ("Novelos" or the "Company") is a biopharmaceutical company developing compounds for the treatment of cancer.

On April 8, 2011, the Company entered into 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", see Note 10). Immediately prior to the Acquisition, the Company completed a 1-for-153 reverse split of its common stock (the "Reverse Split"). The Company then issued to the former shareholders of Cellectar 17,001,596 shares of its common stock as consideration for the Acquisition, which shares 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 (in each case after giving effect to the Reverse Split) for gross proceeds of approximately $5,135,000. As a result of the Acquisition, the Company is implementing 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 Reverse Split reduced the number of outstanding shares of Common Stock from 452,866,983 shares to 2,959,871 shares. On the Company's balance sheet, the aggregate par value of the issued common stock was reduced by reclassifying the par value amount of the eliminated shares of common stock to additional paid-in capital. All per share amounts and outstanding shares, including all common stock equivalents, stock options and warrants, have been retroactively restated in these financial statements and notes for all periods presented to reflect the Reverse Split. Additionally, the number of authorized shares of common stock disclosed on the balance sheet has been reduced to 150,000,000 from 750,000,000 to reflect the reduction in authorized shares of common stock that became effective concurrent with the Reverse Split.

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.

On February 24, 2010, the Company announced that its Phase 3 clinical trial for NOV-002 in non-small cell lung cancer ("NSCLC") (the "Phase 3 Trial") did not meet its primary endpoint of a statistically significant increase in median overall survival. Following evaluation of the detailed trial data, on March 18, 2010, the Company announced that the secondary endpoints had also not been met in the Phase 3 Trial and that it had discontinued development of NOV-002 for NSCLC in combination with first-line paclitaxel and carboplatin chemotherapy.

These financial statements have been prepared on the basis that the Company will continue as a going concern. The Company has generated insignificant revenues and has incurred operating losses since inception in devoting substantially all of its efforts toward research and development. The Company expects that it will continue to generate operating losses for the foreseeable future. The Company believes that its cash on hand at March 31, 2011, 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 unaudited financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information and with the instructions to Form 10-Q. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for the fair presentation of these financial statements have been included. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Interim results are not necessarily indicative of results to be expected for other quarterly periods or for the entire year ending December 31, 2011. These unaudited financial statements should be read in conjunction with the audited financial statements and related notes thereto included in the Company's latest annual report for the year ended December 31, 2010 on Form 10-K, which was filed with the Securities and Exchange Commission ("SEC") on April 14, 2011. The report from the Company's independent registered public accounting firm dated April 11, 2011 and included with its annual report on Form 10-K indicated that factors exist that raised substantial doubt about the Company's ability to continue as a going concern.

Comprehensive Income (Loss) – The Company had no components of comprehensive income (loss) other than the net income (loss) in all periods presented.

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 105,042 at March 31, 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 March 31, 2011, these warrants represented the only outstanding derivative instruments issued or held by the Company.

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:

	March 31, 2011			
	Level 1	**Level 2**	**Level 3**	**Fair Value**
Liabilities:				
Warrants	$ -	$ 162,760	$ -	$ 162,760

	December 31, 2010			
	Level 1	**Level 2**	**Level 3**	**Fair Value**
Liabilities:				
Warrants	$ -	$ 288,250	$ -	$ 288,250

The Company uses valuation methods and assumptions that consider among others 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 5).

3. COLLABORATION AGREEMENTS

In December 2007 the Company entered into a Collaboration Agreement with Lee's Pharmaceutical (HK) Ltd. ("Lee's Pharm"). Pursuant to this agreement, Lee's Pharm obtained an exclusive license to develop, manufacture and commercialize NOV-002 and NOV-205 in China, Hong Kong, Taiwan and Macau (the "Chinese Territory"). The Company has suspended further development of NOV-205; however, this suspension may not impact the development strategy of Lee's Pharm. Under the terms of the agreement the Company received a license fee of $500,000 in March 2008 and is entitled to receive up to $1,700,000 in future milestone payments upon the completion of development and marketing milestones by Lee's Pharm. This initial $500,000 payment received is being amortized over the estimated term of this agreement, 15 years. Accordingly, $8,333 of license revenue was recognized in each of the three-month periods ended March 31, 2011 and 2010.

The Lee's Pharm agreement provides that the Company receive royalty payments of 20-25% of net sales of NOV-002 in the Chinese Territory and receive royalty payments of 12-15% of net sales of NOV-205 in the Chinese Territory. Lee's Pharm is obligated to reimburse the Company for the manufacturing cost of pharmaceutical products provided to Lee's Pharm in connection with the agreement. Lee's Pharm has committed to spend a minimum amount on development in the first four years of the agreement. The agreement expires upon the expiration of the last patent covering any of the licensed products, or twelve years from the date of the first commercial sale in China, whichever occurs later.

On February 11, 2009, Novelos entered into a collaboration agreement (the "Collaboration Agreement") with Mundipharma International Corporation Limited ("Mundipharma") to develop, manufacture and commercialize, on an exclusive basis, Licensed Products (as defined in the Collaboration Agreement), which includes the Company's compound, NOV-002, in Europe (other than the Russian Territory), Asia (other than the Chinese Territory) and Australia (collectively referred to as the "Mundipharma Territory"). Mundipharma is an independent associated company of Purdue Pharma, L.P. ("Purdue"). The Collaboration Agreement provides for Mundipharma to pay the Company royalties and fixed milestone payments based on sales and commercial launches in the licensed territories.

For countries in which patents are held, the Collaboration Agreement expires on a country-by-country basis within the Mundipharma Territory on the earlier of (1) expiration of the last applicable Novelos patent within the country or (2) the determination that any patents within the country are invalid, obvious or otherwise unenforceable. For countries in which no patents are held, the Collaboration Agreement expires the earlier of 15 years from its effective date or upon generic product competition in the country resulting in a 20% drop in Mundipharma's market share. Novelos may terminate the Collaboration Agreement upon breach or default by Mundipharma. Mundipharma may terminate the Collaboration Agreement upon breach or default, filing of voluntary or involuntary bankruptcy by Novelos, the termination of certain agreements with companies associated with the originators of the licensed technology, or 30-day notice for no reason. If any regulatory approval within the Mundipharma Territory is suspended as a result of issues related to the safety of the Licensed Products, then Mundipharma's obligations under the Collaboration Agreement will be suspended until the regulatory approval is reinstated. If that reinstatement does not occur within 12 months of the suspension, then Mundipharma may terminate the Collaboration Agreement.

Concurrently with the execution of the Collaboration Agreement, Novelos completed a private placement of Series E preferred stock and common stock purchase warrants to Purdue.

The Company expects that the negative results of its Phase 3 Trial will adversely affect development and commercialization of NOV-002 under the collaboration agreements with Lee's Pharm and Mundipharma.

4. STOCKHOLDERS' EQUITY

Common Stock Warrants — The following table summarizes information with regard to outstanding warrants as of March 31, 2011, issued in connection with equity and debt financings since 2005.

Offering	Number of Number of Shares Issuable Upon Exercise of Outstanding Warrants	Exercise Price	Expiration Date
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	60,331	$ 99.45	December 31, 2015
August 2009 Private Placement	31,194	$ 100.98	December 31, 2015
July 2010 Direct Offering (1)	105,042	$ 10.71	July 27, 2015
Preferred Incentive Warrants	105,042	$ 16.065	July 27, 2015
Total	315,170		

(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. See Note 10.

On March 7, 2011, warrants to purchase 33,569 shares of common stock at $234.09 per share expired unexercised.

On May 3, 2011, 18,153 shares of common stock were issued in connection with the cashless exercise of warrants to purchase 27,311 shares of common stock at $0.75 per share.

5. STOCK-BASED COMPENSATION

The following table summarizes amounts charged (credited) 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,	
	2011	2010
Employee and director stock option grants:		
Research and development	$ 49,298	$ 57,113
General and administrative	59,682	82,928
	108,980	140,041
Non-employee consultant stock option grants:		
Research and development	(545)	(210,825)
General and administrative	(57)	(26,695)
	(602)	(237,520)
Total stock-based compensation	$ 108,378	$ (97,479)

There were no stock option grants during the three months ended March 31, 2011 or 2010.

	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	49,227	$ 100.61	6.9	$ 24,842
Outstanding at March 31, 2011	49,227	$ 100.61	6.6	12,421
Exercisable at March 31, 2011	40,348	$ 101.03	6.2	$ 12,421

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 three months ended March 31, 2011. Shares of common stock issued upon the exercise of options are from authorized but unissued shares.

As of March 31, 2011, there was approximately $538,000 of total unrecognized compensation cost related to unvested stock-based compensation arrangements. Of this total amount, 64% and 36% are expected to be recognized during 2011 and 2012, respectively. The Company expects 8,879 in unvested options to vest in the future. The weighted-average grant-date fair value of vested and unvested options outstanding at March 31, 2011 was $62.75 and $68.07, respectively.

6. NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted net income per share is computed by dividing net income attributable to common stockholders by the sum of 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, warrants and convertible preferred stock and accumulated dividends. Since the Company has a net loss for the three months ended March 31, 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 months ended March 31, 20011.

The following table sets forth the shares and net income used in the diluted earnings per share computation for the three months ended March 31, 2010:

Numerator:	
Net income available to common stockholders used in basic earnings per share calculation	$ 4,693,487
Derivative gain recorded on dilutive warrants	(2,340,515)
Dividends on convertible preferred stock	656,635
Net income available to common stockholders used in diluted earnings per share calculation	$ 3,009,607
Denominator:	
Weighted average shares of common stock used in the computation of basic earnings per share	522,350
Dilutive effect of stock options	26,430
Dilutive effect of warrants to purchase common stock	79,646
Dilutive effect of convertible preferred stock	253,435
Shares used in computation of diluted earnings per share	881,861

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

	Three Months Ended March 31,	
	2011	2010
Stock options	49,227	3,970
Warrants	315,170	43,349

7. INCOME TAXES

The Company accounts for income taxes in accordance with the Income Taxes Topic of the FASB ASC. 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 months ended March 31, 2011 or 2010 because the Company has experienced losses on a tax basis since inception. The net income reported for the three months ended March 31, 2010 was a result of the gain recorded on the revaluation of derivative warrant liability during that period, which is a nontaxable item. The Company has not recorded deferred tax assets as their realization is uncertain.

8. LITIGATION

A purported 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 the Company, on behalf of himself and all others who purchased or otherwise acquired the Company's common stock in the period between December 14, 2009 and February 24, 2010, against the Company 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 that the Company violated Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder in connection with alleged disclosures related to the Phase 3 clinical trial of NOV-002 for non-small cell lung cancer. On December 6, 2010, the Company 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 Company filed its response to their opposition. The motion to dismiss remains pending. The Company believes the allegations are without merit and intends to defend vigorously against the allegations.

On June 28, 2010, the Company received a letter from counsel to ZAO BAM and ZAO BAM Research Laboratories (Russian companies, collectively referred to as "BAM") alleging that the Company 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 the Company had entered into with BAM on June 20, 2000 (the "June 2000 Agreement"). The letter references the Company's amendment, submitted to the FDA on August 30, 2005, to its 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 the Company's knowledge, still the general director and principal shareholder of ZAO BAM. The Company believes the allegations are without merit and intends to defend vigorously against any proceedings that BAM may initiate as to these allegations. On September 24, 2010, the Company 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, the Company responded to the counterclaims, denying BAM's material allegations and stating its affirmative defenses. The Company believes the counterclaims are without merit and intends to vigorously defend against them.

9. COMMITMENTS

Retention Agreements

The Company has entered into retention agreements with each of its three 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 the Company 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 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 Named Executive Officers pursuant to the retention agreements is approximately $86,000 to Christopher Pazoles.

During the three months ended March 31, 2011, pursuant to retention agreements, the Company paid a total of approximately $218,000 in severance payments to employees terminated during that period, including $83,000 to Elias Nyberg, the Company's former vice president of regulatory, quality and compliance.

10. SUBSEQUENT EVENTS

Merger Agreement

On April 8, 2011, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") with Cellectar, Inc. ("Cellectar") and Cell Acquisition Corp. (the "Merger Subsidiary"), a wholly-owned subsidiary of Novelos, pursuant to which Cellectar was merged into the Merger Subsidiary (the "Acquisition"). 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. Prior to the Acquisition, Cellectar was in the business of developing drugs for the treatment and diagnosis of cancer. The Company will continue to develop Cellectar's compounds following the Acquisition.

As consideration for the Acquisition, the former stockholders of Cellectar received aggregate consideration consisting of a number of shares of Novelos common stock constituting, after giving effect to the Acquisition but before giving effect to the concurrent private placement of the Company's securities described below, approximately 85% of the outstanding shares of Novelos common stock. Prior to the Acquisition, the Company 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 following the effectiveness of the Reverse Split, there were 2,959,871 shares of common stock outstanding, and the Company issued 17,001,596 shares of its common stock to the former stockholders of Cellectar upon the effectiveness of the Acquisition.

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 for their services. 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 for their services.

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 will be accounted for as a reverse acquisition whereby Cellectar, Inc. will be treated as the accounting acquirer. The audited financial statements of Cellectar as of and for the years ended December 31, 2009 and 2010 and the unaudited financial statements of Cellectar as of and for the three months ended March 31, 2011 and 2010 will be filed with the SEC by June 22, 2011 and the purchase accounting for the reverse acquisition will be included in the Company's financial statements for the quarter ended June 30, 2011.

Securities Purchase Agreement

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 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 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 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. The Company is also required to use 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. 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.

The Company paid to Rodman, the placement agent for the financing, a cash fee equal to $200,000 and warrants to purchase 192,931 shares of its common stock 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 warrants have the same terms as those issued to the investors in the private placement.

As a result of the financing, warrants to purchase 105,042 shares of common stock at $10.71 per share, giving effect to the Reverse Split, became exercisable for $0.75 per share according to their terms. On May 3, 2011, 18,153 shares of common stock were issued in connection with the cashless exercise 27,311 of these warrants.

Changes in Directors and Executive Officers

Effective April 8, 2011, prior to the completion of the Acquisition, Michael J. Doyle, Sim Fass and David B. McWilliams resigned from the Company's board of directors and their respective committee appointments.

Effective April 8, 2011, as a condition to the completion of the Acquisition, Jamey P. Weichert, Thomas Rockwell Mackie, John Neis, John E. Niederhuber and Michael F. Tweedle were appointed to the Company's board of directors. Jamey P. Weichert, Thomas Rockwell Mackie and John Neis previously served on the board of directors of Cellectar.

On April 25, 2011, the Company's board of directors appointed the following individuals to serve on the following committees of the board of directors.

Howard M. Schneider, John Neis and John E. Niederhuber were appointed to the audit committee of the board of directors. Mr. Schneider was appointed as the chairman of that committee, a position that he held prior to the Acquisition.

Thomas Rockwell Mackie, James S. Manuso, John Neis and Michael F. Tweedle were appointed to the compensation committee of the board of directors. Dr. Mackie was appointed as the chairman of that committee.

Stephen A. Hill, John E. Niederhuber and James S. Manuso were appointed to the nominating and corporate governance committee of the board of directors. Dr. Hill was appointed as the chairman of that committee.

Amendment of Certificate of Incorporation

Effective April 7, 2011 the Company's certificate of incorporation was amended to eliminate the Certificate to Set Forth Designations, Voting Powers, Preferences, Restrictions and Relative Rights of Series C 8% Cumulative Convertible Preferred Stock. There had not been any shares of Series C preferred stock outstanding since December 2010.

Effective April 7, 2011 the Company's certificate of incorporation was amended to eliminate the Certificate of Designations, Preferences and Rights of Series E Convertible Preferred Stock. There had not been any shares of Series E preferred stock outstanding since December 2010.

Prior to the closing of the Acquisition on April 8, 2011, the Company amended and restated its certificate of incorporation in order to (a) effect the reverse split; (b) reduce the number of shares of authorized common stock from 750,000,000 to 150,000,000; (c) eliminate the right of the stockholders to act by written consent; and (d) classify the board of directors into three classes. Class I directors will stand for re-election at the Company's next annual meeting of stockholders, Class II directors will stand for re-election at the 2012 annual meeting of stockholders, and Class III directors will stand for re-election at the 2013 annual meeting of stockholders. Thomas Rockwell Mackie, James S. Manuso and John Niederhuber serve as Class I directors, Stephen A. Hill, Michael F. Tweedle and John Neis serve as Class II directors, and Harry S. Palmin, Jamey P. Weichert and Howard M. Schneider serve as Class III directors.

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 unbilled contract service fees and amounts due to clinical research organizations, and clinical investigators, the risk factors set forth below under the caption "Risk Factors" and the risk factors set forth in Item 1A of our annual report for the year ended December 31, 2010 on Form 10-K, which was filed with the SEC on April 14, 2011. 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.

Transaction with Cellectar

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. The Company will conduct its operations from Cellectar's headquarters in Madison, WI, and the Company's executive offices will remain in Newton, MA. Further development of Novelos' other compounds (NOV-002 and NOV-205) has been suspended pending further evaluation.

Overview

Prior to the Acquisition, we 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 we 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.

As a result of the Acquisition, we are now developing 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).

CLR1401 ("COLD") is a cancer-targeted chemotherapy that 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 which offers the prospect of greater systemic exposure and superior efficacy. We expect to submit an Investigational New Drug ("IND") application to the Food and Drug Administration ("FDA") in late 2012.

^{131}I-CLR1404 (“HOT”, a radiolabeled compound) is a small-molecule, broad-spectrum, cancer-targeted radiopharmaceutical that we believe has first-in-class potential. HOT is comprised of a small quantity of COLD, 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 that imbues HOT with broad-spectrum anti-cancer activity. In 2009, we opened an IND with the FDA to study HOT in humans. In early 2010, we 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 third 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 response in the Phase 1b trial or calculating it from 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 ten 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 one model, 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 and its non-specific mechanism of cancer-killing (radiation), we expect to first develop HOT as a monotherapy, initially for solid tumors.

^{124}I-CLR1404 (“LIGHT”, labeled with a shorter-lived radioisotope, 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, acting as a cancer-targeted delivery and retention vehicle, and incorporating ^{124}I, a 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 mid-2011, and that the trials will initially include glioma, lung and breast cancers. These human trials, if successful, will serve two important purposes. The first purpose is to provide proof-of-concept for LIGHT itself as a PET imaging agent. We believe LIGHT has 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. The second purpose is to accelerate clinical development of HOT by enabling estimation of efficacious doses of HOT for Phase 2 trials.

We believe these compounds are selectively taken up and retained in cancer cells (including cancer stem cells) versus normal cells. We believe our compounds directly kill cancer cells while minimizing harm to normal cells, offering the potential for a paradigm shift in cancer therapy – efficacy versus all three major drivers of mortality in cancer: primary tumors, metastases and 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 radiation sufficient to kill cancer cells. Other labeled variations of our compounds provide imaging agents for an accurate diagnosis of cancer, including metastases, and can also objectively measure therapeutic success. Together, this platform is capable of yielding multiple, distinct oncology product opportunities which enable us to “find, treat and follow” cancer anywhere in the body in a novel, effective and highly selective way.

Results of Operations

Revenue. Revenue consists of the amortization of license fees received in connection with partner agreements.

Research and development expense. Research and development expense consists of costs incurred in identifying, developing and testing product candidates, which primarily include salaries and related expenses for personnel, fees paid to professional service providers for independent monitoring and analysis of our clinical trials, costs of contract research and manufacturing and costs to secure intellectual property. Prior to the Acquisition, we had been developing two proprietary compounds, NOV-002 and NOV-205. To date, most of our research and development costs have been associated with our NOV-002 compound. Following the Acquisition, development of these compounds has been suspended.

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 facility costs, insurance, costs for public and investor relations, directors’ fees and professional fees for legal and accounting services.

Quarters Ended March 31, 2011 and 2010

Revenue. During the three months ended March 31, 2011 and 2010, we recognized $8,000 in license fees in each of the three-month periods in connection with our collaboration agreement with Lee's Pharm.

Research and Development. Research and development expense for the three months ended March 31, 2011 was $533,000, compared to $1,911,000 for the same period in 2010. The $1,378,000, or 72%, decrease in research and development expense was due to a combination of factors. In anticipation of the results of our Phase 3 clinical trial of NOV-002 in advanced NSCLC, announced in February 2010, we increased certain preclinical research and manufacturing activities in early 2010 in preparation for a possible filing of a new drug application later in 2010. As a result, consulting costs related to preclinical and manufacturing work decreased by $1,053,000 in the three months ended March 31, 2011 compared to the same period of 2010. Contract research costs related to our Phase 3 clinical trial of NOV-002 in advanced NSCLC, completed in February 2010, decreased by $522,000 in the three months ended March 31, 2011 compared to the three months ended March 31, 2010. In addition, clinical development costs for NOV-205 decreased by $115,000 in the first three months of 2011 compared to the same period of 2010, as a result of the commencement in March 2010 of a Phase 2 trial evaluating NOV-205 in chronic hepatitis patients. That trial was completed in late 2010. Stock-based compensation costs increased $203,000. Salaries and overhead costs increased by $109,000 in the first three months of 2011 compared to the same period of 2010 principally as a result of severance payments made in the first quarter of 2011 as we reduced headcount.

General and Administrative. General and administrative expense for the three months ended March 31, 2011 was $612,000 compared to $645,000 in the same period in 2010. The $33,000, or 5%, decrease is due to a $73,000 decrease in overhead costs principally resulting from cost control measures and a decrease in liability insurance premium costs. These decreases were offset in part by a $37,000 increase in professional fees due to an increase in transaction-related legal costs. Stock-based compensation also increased by $3,000.

Gain on Derivative Warrants. We recorded a gain on derivative warrants of $125,000 and $7,897,000 in the three months ended March 31, 2011 and March 31, 2010, respectively. These amounts represent the change in fair value, during the respective periods, 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. The large decrease in the amount of the liability between 2010 and 2011 is a result of the significant drop in our stock price following the announcement of negative Phase 3 Trial results on February 24, 2010. This gain is not taxable; accordingly, no tax provision has been recorded.

Liquidity and Capital Resources

We have financed our operations since inception primarily via the sale of equity securities. To date, Novelos has raised capital aggregating approximately $80 million, of which approximately $39 million was originally issued as preferred stock. From 2002 through 2010, Cellectar raised capital aggregating approximately $30 million through debt and equity issuances. On November 30, 2010, all of our outstanding preferred stock was converted into shares of common stock pursuant to an exchange agreement with each of the former holders of our preferred stock. As of March 31, 2011, we had approximately $1,031,000 in cash and equivalents.

During the three months ended March 31, 2011, approximately $1,314,000 in cash was used in operations. During this period we reported a net loss of $1,010,000. However, this loss included the following non-cash items: a $125,000 gain on derivative warrants, $108,000 in stock-based compensation and $2,000 in depreciation and amortization expense. After adjustment for these non-cash items, we used $316,000 in cash for the payment of accounts payable and accrued liabilities. Other changes in working capital provided cash of $27,000. We incurred $28,000 in deferred transaction costs related to the financing on April 8, 2011.

On February 24, 2010, we announced that our Phase 3 clinical trial for NOV-002 in NSCLC (the "Phase 3 Trial") did not meet its primary endpoint of a statistically significant increase in median overall survival. On March 18, 2010, we announced that the secondary endpoints had also not been met in the Phase 3 Trial and that we had discontinued development of NOV-002 for NSCLC in combination with first-line paclitaxel and carboplatin chemotherapy.

As described above, on April 8, 2011, we completed the Reverse Split and Acquisition. Upon the closing of the Acquisition, we completed the private placement of our common stock and warrants for gross proceeds of approximately $5,135,000. We paid cash advisory and placement agent fees in the aggregate amount of $650,000 in connection with these transactions. As a result of the Acquisition, we are implementing a revised business plan focused on the development of the Cellectar compounds. Further development of Novelos' other compounds (NOV-002 and NOV-205) has been suspended pending further evaluation.

We expect that we will continue to generate operating losses for the foreseeable future. At March 31, 2011, our cash balance was $1,031,000. We believe our cash on hand, including the proceeds from the April private placement, is adequate to fund operations into the fourth quarter of 2011. 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 plan to actively pursue financing alternatives, but there can be no assurance that we will obtain the necessary funding.

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, 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 March 31, 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

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 2011 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

A purported 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 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 disclosures related to the Phase 3 clinical trial of NOV-002 for non-small cell lung cancer. On December 6, 2010, we 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. Our motion to dismiss remains pending. We believe the allegations are without merit and intend to defend vigorously against the allegations.

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"). 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. We believe the allegations are without merit and intend to defend vigorously against any proceedings that BAM may initiate as to these allegations. 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. On November 29, 2010, BAM answered the complaint, denying the material allegations, and stating its affirmative defenses and certain counterclaims. On January 14, 2011, we responded to the counterclaims, denying BAM's material allegations and stating our affirmative defenses. We believe the counterclaims are without merit and intend to vigorously defend against them.

Item 1A. Risk Factors

We will require additional capital in order to continue our operations.

We expect that we will continue to generate operating losses for the foreseeable future. At March 31, 2011, our cash balance was $1,031,000. Following the Acquisition, on April 8, 2011, we completed a private placement of common stock and warrants for gross proceeds of $5,135,000. We believe our cash on hand, including the proceeds from the April private placement, is adequate to fund operations into the fourth quarter of 2011. 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 plan to actively pursue financing alternatives, but there can be no assurance that we will obtain the necessary funding.

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

After completion of the Acquisition and private placement, 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.

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

On April 8, 2011, we issued an aggregate of 17,001,596 shares of our common stock as merger consideration to the former shareholders of Cellectar.

Concurrently with the Acquisition, on April 8, 2011, we entered into a Securities Purchase Agreement with certain accredited investors under which we sold an aggregate of 6,846,537 units, each unit consisting of one share of our common stock and a warrant to purchase one share of our common stock, at a price of $0.75 per unit for gross proceeds of $5,134,903. The warrants have an exercise price of $0.75 and expire on March 31, 2016. We also issued a warrant to purchase 192,931 shares of our common stock for $0.75, expiring March 31, 2016, to the placement agent in the financing.

On May 3, 2011, we issued 18,153 shares of our common stock in connection with the cashless exercise of warrants to purchase 27,311 shares of common stock at $0.75 per share.

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 among Common Horizons, Inc., Nove Acquisition, Inc. and Novelos Therapeutics, Inc. dated May 26, 2005		8-K	June 2, 2005	99.2
2.2	Agreement and plan of merger between Common Horizons and Novelos Therapeutics, Inc. dated June 7, 2005		10-QSB	August 15, 2005	2.2

Exhibit No.	Description	Filed with this Form 10-Q	Incorporated by Reference		
			Form	Filing Date	Exhibit No.
2.3	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	August 26, 2009	3.1
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: May 13, 2011

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

EXHIBIT INDEX

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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			

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: May 13, 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: May 13, 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 March 31, 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: May 13, 2011

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

Date: May 13, 2011