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: September 30, 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.*)

3301 Agriculture Drive, Madison, Wisconsin 53716
(*Address of principal executive offices*)

(608) 441-8120
(*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 November 12, 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)

	September 30, 2013	December 31, 2012
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 5,110,493	$ 4,677,545
Restricted cash	55,000	55,000
Prepaid expenses and other current assets	329,352	327,393
Deferred financing costs	—	70,539
Total current assets	5,494,845	5,130,477
RESTRICTED CASH	—	2,000,000
FIXED ASSETS, NET	2,449,786	2,645,003
GOODWILL	1,675,462	1,675,462
OTHER ASSETS	27,222	27,222
TOTAL ASSETS	$ 9,647,315	$ 11,478,164
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	$ 1,157,313	$ 716,990
Derivative liability	3,469,548	13,304
Capital lease obligations, current portion	2,309	2,397
Total current liabilities	4,629,170	732,691
LONG-TERM LIABILITIES:		
Notes payable	450,000	450,000
Deferred rent	141,854	135,404
Capital lease obligations, net of current portion	—	1,694
Total long-term liabilities	591,854	587,098
TOTAL LIABILITIES	5,221,024	1,319,789
COMMITMENTS AND CONTINGENCIES (Note 7 and Note 9)		
STOCKHOLDERS' EQUITY:		
Preferred stock, $0.00001 par value; 7,000 shares authorized; none issued and outstanding as of September 30, 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 September 30, 2013 and December 31, 2012, respectively	574	464
Additional paid-in capital	51,536,776	50,435,311
Deficit accumulated during the development stage	(47,111,059)	(40,277,400)
Total stockholders' equity	4,426,291	10,158,375
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 9,647,315	$ 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 September 30,		Nine Months Ended September 30,		Cumulative Development-Stage Period from November 7, 2002 (date of inception) through September 30,
	2013	2012	2013	2012	2013
COSTS AND EXPENSES:					
Research and development	$ 2,066,827	$ 1,253,066	$ 5,306,277	$ 3,896,005	$ 31,234,002
General and administrative	843,622	800,952	3,039,074	2,695,503	16,333,784
Merger costs	—	—	—	—	799,133
Total costs and expenses	2,910,449	2,054,018	8,345,351	6,591,508	48,366,919
LOSS FROM OPERATIONS	(2,910,449)	(2,054,018)	(8,345,351)	(6,591,508)	(48,366,919)
OTHER INCOME (EXPENSE):					
Grant income	—	—	—	—	244,479
Gain (loss) on revaluation of derivative warrants	1,597,372	3,902	2,263,756	(42,178)	2,217,744
Loss on issuance of derivative warrants	—	—	(744,957)	—	(744,957)
Interest expense, net	(2,241)	(2,096)	(7,107)	(6,240)	(462,567)
Other income	—	—	—	—	1,161
Total other income (expense), net	1,595,131	1,806	1,511,692	(48,418)	1,255,860
NET LOSS	(1,315,318)	(2,052,212)	(6,833,659)	(6,639,926)	(47,111,059)
DEEMED DIVIDEND ON WARRANTS	—	(543,359)	—	(543,359)	(543,359)
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS	$ (1,315,318)	$ (2,595,571)	$ (6,833,659)	$ (7,183,285)	$ (47,654,418)
BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	$ (0.02)	$ (0.06)	$ (0.12)	$ (0.18)	$ (2.82)
SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	57,397,997	43,286,515	55,383,345	39,611,899	16,876,454

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

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

	Nine Months Ended September 30,		Cumulative Development-Stage Period from November 7, 2002 through September 30,
	2013	2012	2013
Net loss	$ (6,833,659)	$ (6,639,926)	$ (47,111,059)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	325,660	384,083	3,238,951
Stock-based compensation	1,101,465	1,159,911	5,459,635
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	(2,263,756)	42,178	(2,217,744)
Loss on issuance of derivative warrants	744,957	—	744,957
Changes in:			
Prepaid expenses and other current assets	(1,959)	(81,012)	(313,182)
Accounts payable and accrued liabilities	440,323	234,767	777,184
Accrued interest	—	—	463,722
Deferred rent	6,450	8,828	141,854
Cash used in operating activities	(6,476,006)	(4,891,171)	(38,193,736)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Cash acquired in a business combination	—	—	905,649
Purchases of fixed assets	(134,956)	(37,142)	(5,719,239)
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	2,000,000	—	(55,000)
Payment for intangible assets	—	—	(19,671)
Cash provided by (used in) investing activities	1,865,044	(37,142)	(4,881,261)
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	(1,782)	(1,661)	(8,665)
Proceeds from issuance of common stock, net of issuance costs	4,975,153	4,870,978	43,688,181
Proceeds from exercise of warrants	—	150,800	1,338,300
Repurchase of common stock	—	—	(31,667)
Cash in lieu of fractional shares in a business combination	—	—	(145)
Change in deferred financing costs	70,539	—	28,500
Cash provided by financing activities	5,043,910	5,020,117	48,185,490
INCREASE IN CASH AND EQUIVALENTS	432,948	91,804	5,110,493
CASH AND EQUIVALENTS AT BEGINNING OF PERIOD	4,677,545	5,505,960	—
CASH AND EQUIVALENTS AT END OF PERIOD	$ 5,110,493	$ 5,597,764	$ 5,110,493
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Fair value of warrants classified as derivative liability	$ 5,720,000	$ —	$ 5,720,000
Interest paid	$ —	$ 43,855	$ 208,689
Fair value of derivative warrants reclassified to equity upon cashless exercise	$ —	$ —	$ 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.

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 $47,111,059 at September 30, 2013. During the nine months ended September 30, 2013, the Company generated a net loss of $6,833,659 and the Company expects that it will continue to generate operating losses for the foreseeable future. The Company believes that its cash balance at September 30, 2013 is adequate to fund operations at budgeted levels through February 2014. 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 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 September 30, 2013, the consolidated statements of operations for the three and nine months ended September 30, 2013 and 2012 and the cumulative period November 7, 2002 (date of inception) through September 30, 2013, and the consolidated statements of cash flows for the three and nine months ended September 30, 2013 and 2012 and the cumulative period November 7, 2002 (date of inception) through September 30, 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 September 30, 2013 and consolidated results of its operations and its cash flows for the three and nine months ended September 30, 2013 and 2012 and the period from November 7, 2002 (inception) to September 30, 2013. The results for the nine months ended September 30, 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 September 30, 2013 consists of a certificate of deposit of $55,000 required under the Company's lease agreement for its Madison, Wisconsin facility. In October 2013, the Company received a waiver of its agreement to use the proceeds of a November, 2012 private placement for the construction of additional manufacturing facilities at its Madison, WI location. Accordingly, the corresponding amount of $1,878,232 was reclassified from restricted cash to cash and cash equivalents on the balance sheet as of September 30, 2013 (see Note 10).

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 September 30, 2013. At December 31, 2012, the Company had recorded $70,539 of costs in connection with a public offering of stock. During the nine months ended September 30, 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 September 30, 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 nine months ended September 30, 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 September 30, 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 September 30, 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:

	September 30, 2013			
	Level 1	Level 2	Level 3	Fair Value
Liabilities:				
Warrants	$ -	$ 3,469,548	$ -	$ 3,469,548

	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 together with assumptions that consider, among other variables, the fair value of the underlying stock, risk-free interest rates ranging from 0.10% to 1.22%, volatility ranging from 75% to 115%, the contractual term of the warrants ranging from 0.39 to 4.39 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 are 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 are 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 on the date of issuance. The fair value upon issuance exceeded the net proceeds received in the offering. The excess of $744,957 was recorded as a loss on issuance of derivative warrants on the Company's consolidated statement of operations for the nine months ended September 30, 2013. The Company utilized a modified option-pricing model to determine the fair value of the warrants (see Note 2). The change in fair value from June 30, 2013 through September 30, 2013 of $1,595,000 is recorded as a gain on derivatives in the three months ended September 30, 2013. The change in fair value from issuance date through September 30, 2013 of $2,255,000 is recorded as a gain on derivatives in the nine months ended September 30, 2013. 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 September 30, 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 September 30,		Nine Months Ended September 30,		Cumulative Development-Stage Period from November 7, 2002 through September 30,
	2013	2012	2013	2012	2013
Employee and director stock option grants:					
Research and development	$ 84,949	$ 78,627	$ 297,561	$ 234,816	$ 1,105,822
General and administrative	206,449	249,562	782,731	747,808	3,941,523
	291,398	328,189	1,080,292	982,624	5,047,345
Non-employee consultant stock option grants:					
Research and development	5,812	3,896	10,134	85,265	126,170
General and administrative	464	4,351	11,039	92,022	286,120
	6,276	8,247	21,173	177,287	412,290
Total stock-based compensation	$ 297,674	$ 336,436	$ 1,101,465	$ 1,159,911	$ 5,459,635

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 its chief executive officer. 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 September 30, 2013	Nine Months Ended September 30, 2013	Three and Nine Months Ended September 30, 2012
Volatility	109 %	109 %	115 %
Risk-free interest rate	1.82 %	0.915% - 1.82 %	0.925 %
Expected life (years)	6.0	6.0	6.0
Dividend	0 %	0 %	0 %
Weighted-average exercise price	$ 0.43	$ 0.47	$ 1.00
Weighted-average grant-date fair value	$ 0.36	$ 0.39	$ 0.85

The Company granted 140,000 and 24,000 stock options during the three months ended September 30, 2013 and 2012, respectively, and granted 160,000 and 24,000 in the nine months ended September 30, 2013 and 2012, respectively, under the Company's 2006 Stock Incentive Plan. All grants were equal to the market value of the Company's common stock on the date of grant.

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	160,000	$ 0.47		
Forfeited	(338,386)	$ 0.81		
Expired	(156,135)	$ 2.47		
Outstanding at September 30, 2013	6,104,667	$ 1.51		
Vested, September 30, 2013	3,674,390	$ 1.96	7.95	$ —
Unvested, September 30, 2013	2,430,277	$ 0.83	8.67	$ —
Exercisable at September 30, 2013	3,674,390	$ 1.96	7.95	$ —

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 September 30, 2013, there was $1,531,476 of total unrecognized compensation cost related to unvested stock-based compensation arrangements. Of this total amount, the Company expects to recognize $861,519, $476,130, $192,760 and $1,067 during 2013, 2014, 2015 and 2016, respectively. The Company expects 2,430,277 in unvested options to vest in the future. The weighted-average grant-date fair value of vested and unvested options outstanding at September 30, 2013 was $0.93 per share and $0.69 per share, 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 and nine months ended September 30, 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 and nine months ended September 30, 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 September 30,		Nine Months Ended September 30,		Cumulative Development-Stage Period from November 7, 2002 (inception) through September 30,
	2013	2012	2013	2012	2013
Warrants	36,782,459	23,767,459	36,782,459	23,767,459	36,782,459
Stock options	6,104,667	4,675,754	6,104,667	4,675,754	6,104,667

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 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. On November 1, 2013, ZAO BAM's appeal was docketed with the Massachusetts Appeals Court. ZAO BAM's appellate brief must be served by December 11, 2013. Novelos' appellate brief will be due 30 days after that service.

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 and nine months ended September 30, 2013, the Company made contributions to UW totaling $62,500 and $187,500, respectively for use towards unrestricted research activities. The Company paid $0 and $73,385 to UW for costs associated with clinical trial and other research agreements during the three and nine months ended September 30, 2013. The Company made contributions to UW of $62,500 and $206,500 for use towards unrestricted research activities during the three and nine months ended September 30, 2012, respectively, and paid UW $0 and $144,044 for costs associated with clinical trial agreements during the three and nine months ended September 30, 2012, respectively.

9. COMMITMENTS

Employment Agreement

On July 29, 2013, the Company announced that Harry Palmin, the Company's President and CEO and a Director, would step down from his positions with the Company, in order to pursue other opportunities, upon the naming of his successor.

In connection with this management transition, on July 26, 2013, the employment agreement between the Company and Harry Palmin, President and CEO, was amended to provide for a lump-sum payment of $150,000, equal to six months base salary, to provide for the continuation of benefits for six months following a termination without cause prior to March 31, 2014, to provide for the acceleration of vesting of all of Mr. Palmin's unvested options in the event of a termination without cause or a resignation for good reason, to extend the exercise period of Mr. Palmin's options to a period of 18 months following termination, and to provide for the payment of $150,000 to Mr. Palmin upon the completion of certain milestones prior to September 30, 2013.

On October 4, 2013, the employment of Mr. Palmin was terminated without cause and Mr. Palmin resigned as a Class III Director of the Company (see Note 10).

Entry into Retention Agreements

Also in connection with the management transition, on July 26, 2013, the Company entered into retention agreements with two executive officers. The retention agreements provide for the payment of a retention bonus equal to thirty percent of the executive's salary if the executives remain employed with the Company as of December 31, 2013. Furthermore, the agreements provide for a lump-sum payment of six months base salary and continuation of benefits for six months following a termination without cause or resignation with good reason on or before June 30, 2014. Upon such a termination, all unvested options held by the executives shall be credited with an additional six months vesting and all vested options held by the executives shall be exercisable for eighteen months following termination. A total of $392,000 may become payable to the executives pursuant to the retention agreements.

10. SUBSEQUENT EVENTS

Management Transition

On October 4, 2013, the employment of Mr. Palmin was terminated without cause in accordance with his employment agreement, as amended, and Mr. Palmin resigned as a Class III Director of the Company. In connection with Mr. Palmin's termination, he received payments totaling $250,000 and will receive continuation of health and dental benefits for six months following the termination date. All of Mr. Palmin's unvested options were vested on his termination date and the exercise period was extended for an additional 18 months until April 4, 2015. In connection with this modification of options, the Company anticipates recognizing incremental stock-based compensation expense of approximately $105,000 and will recognize the remaining unrecognized stock-based compensation expense of approximately $561,000 related to these options in the fourth quarter of 2013.

On October 4, 2013, Dr. Simon Pedder was appointed as Acting Chief Executive Officer and elected as a Class III Director replacing Mr. Palmin. The Company entered into a consulting agreement with Dr. Pedder for the period from October 4, 2013 through March 31, 2014 under which the Company will pay Dr. Pedder a consulting fee of $30,000 per month, granted Dr. Pedder a non-qualified stock option to purchase up to 3,360,000 shares of common stock having an exercise price of $0.33 per share and vesting equally over four years and granted a non-qualified stock option to purchase up to 1,925,573 shares of common stock having an exercise price of $0.75 per share, exercisable as shares of the Company's common stock are issued following the exercise of outstanding warrants to purchase up to 36,585,895 shares of the Company's common stock, in the ratio of one option share for each 19 shares issued upon warrant exercise. Both non-qualified stock options expire on October 4, 2023 unless earlier exercised or terminated.

The Company also entered into an employment agreement with Dr. Pedder effective as of April 1, 2014, pursuant to which Dr. Pedder will serve as President and Chief Executive Officer of the Company at a base salary rate of $350,000 per year beginning April 1, 2014. Dr. Pedder will also receive a monthly reimbursement for temporary living costs not to exceed $4,000 per month during the first 6 months of employment.

Waiver Agreement

On October 9, 2013, the Company entered into a Waiver Agreement with Renova Assets Ltd. ("Renova"), under which Renova has waived the obligations of the Company to use the proceeds from the sale of securities under the Securities Purchase Agreement dated November 1, 2012 for the construction of additional manufacturing facilities for its LIGHT compound. The Company has agreed to use the proceeds for the development of its LIGHT compound and to invite two representatives, designated by Renova, to act as board observers through December 31, 2014. The Company paid $40,000 to Renova as reimbursement for administrative and other costs in connection with the Waiver Agreement. As a result of the designation of the remaining proceeds to fund ordinary operating activities rather than the previously contemplated construction project, the Company has reclassified $1,878,232 from restricted cash to cash and cash equivalents on the accompanying balance sheet as of September 30, 2013.

Restructuring of Board of Directors

On November 7, 2013, Michael F. Tweedle resigned from the Company's board of directors and from his committee appointments. Paul L. Berns was appointed as a Class II director to fill the vacancy created by Dr. Tweedle's resignation. In connection with his appointment, Mr. Berns received an option to purchase 100,000 shares of the Company's common stock at $0.39 per share, vesting in equal quarterly installments over three years and expiring on November 7, 2023. Effective November 8, 2013, Thomas Rockwell Mackie, James S. Manuso, John E. Niederhuber and Howard M. Schneider resigned from the Company's board of directors and from their respective committee appointments. Also on November 8, 2013, Stephen A. Hill and John Neis were redesignated and elected as Class I directors and the number of directors was reduced to five from nine. In connection with their resignations, all of the unvested options held by Messrs. Mackie, Manuso, Niederhuber, Schneider and Tweedle were vested and the exercise period was extended to three years from date of resignation. In connection with this modification of options, the Company estimates that an additional $274,000 in stock-based compensation expense will be recognized in the fourth quarter of 2013.

Stockholder Meeting

On November 8, 2013, the Company's board of directors scheduled a special meeting in lieu of annual meeting of stockholders for December 12, 2013 at 2:00 P.M. central time (the "Special Meeting") at the Company's offices at 3301 Agriculture Drive, Madison, Wisconsin 53716. Stockholders of record at the close of business on November 8, 2013 are entitled to receive notice of, and to vote at, the Special Meeting and any adjournment of the meeting. The agenda for the Special Meeting consists of the election of a Class II director (Mr. Berns having been nominated for re-election), the approval of an amendment of the Company's 2006 Stock Incentive Plan increasing the number of shares authorized for issuance thereunder to 14,000,000 and the ratification of the appointment of Grant Thornton LLP as the Company's independent registered accounting firm for 2013.

Relocation of the Company's Principal Executive Offices

On November 8, 2013, the Company's board of directors voted to relocate the Company's principal executive offices from Newton, Massachusetts to its corporate headquarters in Madison, Wisconsin. In connection with the relocation, and in order to consolidate operations and contain costs, the Newton office will be closed and the roles and responsibilities of the three employees located in Newton, Massachusetts, including Chris Pazoles, Vice President of Research and Development and Joanne Protano, Vice President of Finance, Chief Financial Officer and Treasurer, will be transitioned to Madison, Wisconsin by the end of April 2014. The Company estimates that approximately $330,000 in cash payments will be incurred for exit costs, consisting principally of severance. In addition, the Company will also record incremental stock-based compensation associated with the modification of options upon the termination of employees. The amount of such incremental stock-based compensation can't be estimated at this time.

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 positron emission tomography (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. Chemically, LIGHT is comprised of our proprietary phospholipid ether analogs (PLE), 18-(p-[I-124]iodophenyl) octadecyl phosphocholine, acting as a cancer-targeted delivery and retention vehicle, covalently labeled with iodine-124, a PET imaging radioisotope with a radiation half-life of four days. PET imaging used in conjunction with CT scanning has now become the imaging method of choice in much of oncology. In preclinical studies to date, LIGHT selectively illuminated malignant tumors in 52 of 54 animal models of cancer, demonstrating broad-spectrum, cancer-selective uptake and retention. A company-sponsored, multi-site Phase 2 PET imaging trial of LIGHT vs. MRI in recurrent glioma patients has been approved by the FDA, and patient enrollment is expected to begin by the end of the fourth quarter of 2013. Investigator-sponsored Phase 1-2 trials of LIGHT as a PET imaging agent are also 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 also 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 delineating 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 by the end of the first quarter of 2014 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 September 30, 2013 and 2012

Research and Development. Research and development expense for the three months ended September 30, 2013 was approximately $2,067,000 (comprised of $179,000 in clinical project costs, $720,000 of preclinical project costs, $63,000 of manufacturing and related costs and $1,105,000 in general unallocated research and development costs) compared to approximately $1,253,000 (comprised of $176,000 in clinical project costs, $90,000 in preclinical project costs, $97,000 in manufacturing and related costs, and $890,000 in general unallocated research and development costs) for the three months ended September 30, 2012. The $814,000, or 65%, increase in research and development expense resulted primarily from a $630,000 increase in preclinical costs and $215,000 increase in general unallocated research and development costs. Clinical costs and manufacturing and related costs were consistent on a comparative basis. The $630,000 increase in preclinical costs was related to contract research costs to support IND-enabling activities related to GLOW2. The $215,000 increase in general unallocated research and development costs for the three months ended September 30, 2013 compared to the same period in 2012 was attributable to an increase in payroll and related costs for new employees to support our research efforts.

General and Administrative. General and administrative expense for the three months ended September 30, 2013 was approximately $844,000, representing an increase of about $43,000, or 5%, compared to approximately $801,000 for the three months ended September 30, 2012. However, in the third quarter of 2012, a $125,000 deductible reimbursement was received from our insurance carrier following the dismissal with prejudice of a securities litigation lawsuit and the reimbursement was recorded as a reduction in legal expenses during the three months ended September 30, 2012. Excluding this reimbursement in 2012, legal expenses were about the same in both periods. Higher stock-based compensation and investor relations costs in the three months ended September 30, 2012 versus the same period in 2013 were partially offset by the deductible reimbursement.

Gain (Loss) on Derivative Warrants. We recorded a gain on derivative warrants of approximately $1,597,372 in the three months ended September 30, 2013 and a gain on derivative warrants of approximately $4,000 in the three months ended September 30, 2012. These amounts represent the change in fair value (resulting primarily from a decline in the Company's stock price), during the respective period, of outstanding warrants which contain "down-round" anti-dilution provisions whereby the number of shares for which the warrants are exercisable and/or the exercise price of the warrants is subject to change in the event of certain issuances of stock at prices below the then-effective exercise prices of the warrants.

Interest expense, net. Interest expense, net, for the three months ended September 30, 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.

Deemed Dividend on Warrants. During the three months ended September 30, 2012, we amended the terms of warrants to purchase 5,255,000 shares of our common stock to extend the expiration date for the exercise of such warrants from September 11, 2012 until October 11, 2012. These warrants had been issued in connection with the June 2012 Offering, had an expiration date of September 11, 2012 and were exercisable at a price of $1.00 per share. The modification of the expiration date of the warrants resulted in a deemed dividend to warrant holders of approximately $543,000 which was calculated as the difference between the fair value of the warrants immediately before and after the modification using the Black-Scholes option pricing model. The deemed dividends have been included in the calculation of net loss attributable to common stockholders of approximately $2,596,000, or $0.06 per share, for the three months ended September 30, 2012. The deemed dividends are excluded from our net loss (from operating activities) of approximately $2,052,000, or $0.05 per share, for the three months ended September 30, 2012.

No deemed dividend was recorded in the three months ended September 30, 2013.

Nine Months Ended September 30, 2013 and 2012

Research and Development. Research and development expense for the nine months ended September 30, 2013 was approximately $5,306,000 (comprised of $522,000 in clinical project costs, $937,000 of preclinical project costs, $527,000 of manufacturing and related costs and $3,320,000 in general unallocated research and development costs) compared to approximately $3,896,000 (comprised of $596,000 in clinical project costs, $252,000 of preclinical project costs, $330,000 of chemistry, manufacturing and related costs and $2,718,000 in general unallocated research and development costs) for the same period in 2012. The approximately $1,410,000, or 36%, increase in research and development expense occurred in several categories. The $685,000 increase in preclinical projects was related to contract research costs to support IND-enabling activities related to GLOW2. Manufacturing costs increased $197,000 primarily related to costs associated with the production of clinical trial materials for 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. General unallocated research and development costs increased approximately $602,000 primarily as a result of increases in payroll and related costs for additional headcount to support research activities and approximately $70,000 related to costs incurred in connection with the evaluation of the LIGHT manufacturing build-out. These increases were offset by a $74,000 decrease in clinical project costs which was primarily the result of a reduction in trial start-up costs in the nine months ended September 30, 2013 versus the same period in 2012.

General and Administrative. General and administrative expense for the nine months ended September 30, 2013 was approximately $3,039,000, representing an increase of about $343,000, or 13%, compared to approximately $2,696,000 for the same period of 2012. This increase is the result of an increase in consulting expense in 2013 and a $125,000 decline in legal expense in 2012 reflecting a reimbursement of a deductible amount made by our insurance carrier during the third quarter of 2012 following the dismissal with prejudice of a securities litigation lawsuit. The reimbursement was recorded as a reduction in legal expense during the nine months ended September 30, 2012. Excluding this reimbursement, legal expenses were about the same in both periods.

Gain (Loss) on Derivative Warrants. We recorded a gain on derivative warrants of $2,263,756 in the nine months ended September 30, 2013 and a loss on derivative warrants of approximately $42,000 in the nine months ended September 30, 2012. These amounts represent the change in fair value (resulting primarily from a decline in the Company's stock price), 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 nine months ended September 30, 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 nine months ended September 30, 2012.

Interest expense, net. Interest expense, net, for the nine months ended September 30, 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.

Deemed Dividend on Warrants. During the nine months ended September 30, 2012, we amended the terms of warrants to purchase 5,255,000 shares of our common stock to extend the expiration date for the exercise of such warrants from September 11, 2012 until October 11, 2012. These warrants had been issued in connection with the June 2012 Offering, had an expiration date of September 11, 2012 and were exercisable at a price of $1.00 per share. The modification of the expiration date of the warrants resulted in a deemed dividend to warrant holders of approximately $543,000 which was calculated as the difference between the fair value of the warrants immediately before and after the modification using the Black-Scholes option pricing model. The deemed dividends have been included in the calculation of net loss attributable to common stockholders of approximately $7,183,000, or $0.18 per share, for the nine months ended September 30, 2012. The deemed dividends are excluded from our net loss (from operating activities) of approximately $6,640,000, or $0.17 per share, for the nine months ended September 30, 2012.

No deemed dividend was recorded in the nine months ended September 30, 2013.

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 September 30, 2013, we had approximately $5,110,000 in cash and cash equivalents.

During the nine months ended September 30, 2013, approximately $6,476,000 in cash was used in operations. During this period we reported a net loss of approximately $6,834,000. However, this loss included the following non-cash items: an approximately $745,000 loss on the issuance of derivative warrants, an approximately $2,264,000 gain on the revaluation of derivative warrants, approximately $1,101,000 in stock-based compensation expense, approximately $326,000 in depreciation and amortization expense and an approximately $5,000 loss on the disposal of fixed assets. After adjustment for these non-cash items, the Company utilized approximately $2,000 in cash for the prepayment of certain items and the increase in accounts payable and accrued liabilities provided cash of approximately $440,000. Other changes in working capital provided cash of $7,000.

During the nine months ended September 30, 2013, we purchased approximately $135,000 in fixed assets and reclassified approximately $2,000,000 of restricted cash to operating cash related to the November 2012 private placement. This cash had initially been designated for the construction of an in-house manufacturing facility but is now available for use in operations for the development 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 $47,111,000 at September 30, 2013. During the nine months ended September 30, 2013, we generated a net loss of approximately $6,834,000 and we expect that we will continue to generate operating losses for the foreseeable future. At September 30, 2013, our consolidated cash balance was approximately $5,110,000. We believe this cash balance is adequate to fund operations through February 2014. 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, 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 Acting Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 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 September 30, 2013 our Acting 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 third 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 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. On November 1, 2013, ZAO BAM's appeal was docketed with the Massachusetts Appeals Court. ZAO BAM's appellate brief must be served by December 11, 2013 and Novelos' appellate brief will be due 30 days after that service.

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 September 30, 2013, our consolidated cash balance was approximately $5,110,000. We believe our cash balance at September 30, 2013 is adequate to fund operations through February 2014. 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 September 30, 2013, we had working capital of $865,675 and stockholders' equity of $4,426,291. For the period from Cellectar's inception in November 2002 until the business combination with Novelos on April 8, 2011, and thereafter through September 30, 2013, Cellectar (and, from and after the business combination, Novelos) incurred aggregated net losses of $47,111,059. The net loss for the nine months ended September 30, 2013 was $6,833,659. We may never achieve profitability.

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

Our success will depend to a significant degree on the continued services of our executive officers. There can be no assurance that these individuals will continue to provide services to us. In October 2013, we appointed Dr. Simon Pedder Acting Chief Executive Officer and elected Dr. Pedder as a Class III director, succeeding Harry Palmin, our chief executive officer since 2005 and a Class III director. In November 2013, the board of directors was restructured with the resignation of 5 directors and the appointment of one new director. The restructured board of directors has voted to relocate our principal executive offices from Newton, Massachusetts to Madison, Wisconsin and to transition the roles and responsibilities of Chris Pazoles, our Vice President of Research and Development since 2005 and Joanne Protano, our Vice President of Finance, Chief Financial Officer and Treasurer since 2007, to Madison, Wisconsin. The board also voted to appoint Kathryn McNeil as our Vice President Investor Relations, Public Relations and Corporate Communications and appointed J. Patrick Genn as our Vice President of Business Development. Mr. Genn previously held the position of Vice President of Investor Relations. In addition, Kimberly Hawkins, our Vice President of Clinical Development since 2010, resigned from her position in August 2013. We have appointed Dr. Kevin Kozak, a consultant, as our Chief Medical Officer. As Dr. Pedder and the restructured board of directors continue to develop and implement a revised strategic focus, there could be additional executive and director changes. The successful transitions of these leadership roles will be critical to the continued progress of the Company. In addition, our success may depend on our ability to attract and retain other highly skilled personnel. We may be unable to recruit such personnel on a timely basis, if at all. Our management and other employees may voluntarily terminate their employment with us at any time. The loss of services of key personnel, or the inability to attract and retain additional qualified personnel, could result in delays in development or approval of our products, loss of sales and diversion of management resources. To date, we have not experienced difficulties in attracting and retaining highly qualified personnel, but there can be no assurance we will be successful in doing so in the future.

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

Restructuring of Board of Directors

On November 7, 2013, Michael F. Tweedle resigned as a Class II director and from his committee appointments. Paul L.Berns was appointed as a Class II director to fill the vacancy created by Dr. Tweedle's resignation. In connection with his appointment, Mr. Berns received an option to purchase 100,000 shares of our common stock at $0.39 per share, vesting in equal quarterly installments over three years and expiring on November 7, 2023. Effective November 8, 2013, Thomas Rockwell Mackie, James S. Manuso and John E. Niederhuber (all Class I directors) and Howard M. Schneider (a Class III director) resigned from our board of directors and their respective committee appointments. Stephen A. Hill and John Neis were designated and elected as Class I directors to fill the vacancies created in that Class and the number of directors of the Company was reduced from nine to five, consisting of two in each of Class I and Class III and one in Class II. In connection with their resignations, all of the unvested options held by Messrs. Mackie, Manuso, Niederhuber, Schneider and Tweedle were vested and the exercise period was extended to three years from date of resignation. In connection with this modification of options, we estimate that $274,000 in stock-based compensation expense will be recognized in the fourth quarter of 2013.

Biographical information of Paul L. Berns is as follows:

Mr. Berns, 47, is currently a self-employed consultant to the pharmaceutical industry. Mr. Berns has served as a member of the board of directors of Jazz Pharmaceuticals, Inc. since June 2010. Mr. Berns has been a director of Anacor Pharmaceuticals, Inc. since June 2012 and of XenoPort, Inc. since 2005. From March 2006 to September 2012, Mr. Berns served as President and Chief Executive Officer, and as a member of the Board of Directors of Allos Therapeutics, Inc., a pharmaceutical company acquired by Spectrum Pharmaceuticals, Inc. From July 2005 to March 2006, Mr. Berns was a self-employed consultant to the pharmaceutical industry. From June 2002 to July 2005, Mr. Berns was president, Chief Executive Officer and a director of Bone Care International, Inc., a specialty pharmaceutical company that was acquired by Genzyme Corporation in 2005. From 2001 to 2002, Mr. Berns served as Vice President and General Manager of the Immunology, Oncology and Pain Therapeutics business unit of Abbott Laboratories. From 2000 to 2001, he served as Vice President, Marketing of BASF Pharmaceuticals/Knoll and from 1990 to 2000, Mr. Berns held various positions, including senior management roles, at Bristol-Myers Squibb Company. Mr. Berns received a B.S. in Economics from the University of Wisconsin.

On November 8, 2013, our board of directors appointed the following individuals to serve on the standing committees of the board.

Messrs. Berns, Hill and Neis were appointed to the Audit Committee, Mr. Neis as chairman.

Messrs. Berns, Hill and Neis were appointed to the Compensation Committee, Mr. Hill as chairman.

Mr. Berns, Simon Pedder and Jamey Weichert were appointed to the Nominating and Corporate Governance Committee, Mr. Berns as chairman.

Stockholder Meeting

On November 8, 2013, our board of directors scheduled a special meeting in lieu of annual meeting of stockholders for December 12, 2013 at 2:00 P.M. central time (the "Special Meeting") at our headquarters at 3301 Agriculture Drive, Madison, Wisconsin 53716. Stockholders of record at the close of business on November 8, 2013 are entitled to receive notice of, and to vote at, the Special Meeting and any adjournment of the meeting. The agenda for the Special Meeting consists of the election of a Class II director (Paul Berns having been nominated for re-election), the approval of an amendment of our 2006 Stock Incentive Plan increasing the number of shares authorized for issuance thereunder to 14,000,000 and the ratification of the appointment of Grant Thornton LLP as our independent registered accounting firm for 2013.

Relocation of the Company's Principal Executive Offices

On November 8, 2013, our board of directors voted to relocate our principal executive offices from Newton, Massachusetts to our corporate headquarters in Madison, Wisconsin. In connection with the relocation, and in order to consolidate operations and contain costs, the Newton office will be closed and the roles and responsibilities of the three employees located in Newton, Massachusetts, including Chris Pazoles, Vice President of Research and Development and Joanne Protano, Vice President of Finance, Chief Financial Officer and Treasurer, will be transitioned to Madison, Wisconsin. Dr. Pazoles' employment will be terminated effective November 30, 2013 and in connection with such termination he will receive severance totaling $132,600. All unvested options held by him as of that date will be credited with an additional six months' vesting and shall be exercisable for eighteen months following termination. Ms. Protano will transition her responsibilities by the end of April 2014. We expect to incur approximately $330,000 in cash payments for exit costs, consisting principally of severance. In addition, we will also record incremental stock-based compensation associated with the modification of options upon the termination of employees. The amount of such incremental stock-based compensation can't be estimated at this time.

Changes in Officers

On November 8, 2013, our board appointed Kathryn M. McNeil as our Vice President Investor Relations, Public Relations and Corporate Communications and appointed J. Patrick Genn as our Vice President of Business Development. Mr. Genn had previously held the title of Vice President of Investor Relations.

Item 6. Exhibits

			Incorporation by Reference		
Exhibit No.	**Description**	**Filed with this Form 10-Q**	**Form**	**Filing Date**	**Exhibit No.**
2.1	Agreement and Plan of Merger by and among Novelos Therapeutics, Inc., Cell Acquisition Corp. and Cellectar, Inc. dated April 8, 2011		8-K	April 11, 2011	2.1
3.1	Second Amended and Restated Certificate of Incorporation		8-K	April 11, 2011	3.1
3.2	Amended and Restated By-laws		8-K	June 1, 2011	3.1
4.1	Form of common stock certificate		S-1/A	November 9, 2011	4.1
10.1	Third Amendment to Employment Agreement between the Company and Harry S. Palmin dated July 26, 2013	X			
10.2	Retention Agreement between the Company and Christopher Pazoles dated July 26, 2013	X			
10.3	Retention Agreement between the Company and Joanne M. Protano dated July 26, 2013	X			

10.4	Consulting Agreement between the Company and Simon Pedder dated October 4, 2013	X			
10.5	Employment Agreement between the Company and Simon Pedder dated October 4, 2013	X			
10.6	Waiver Agreement between the Company and Renova Assets Ltd. dated October 9, 2013		8-K	October 10, 2013	10.1
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			

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: November 13, 2013

By: /s/ Simon Pedder
Simon Pedder, Ph.D.
Acting Chief Executive Officer

EXHIBIT INDEX

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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			

THIRD AMENDMENT

TO

EMPLOYMENT AGREEMENT

This AMENDMENT TO EMPLOYMENT AGREEMENT is made as of the 26th day of July, 2013 by and between Novelos Therapeutics, Inc., a Delaware corporation, with executive offices in Newton, Massachusetts (the "Company"), and Harry S. Palmin of Boston, Massachusetts (the "Executive").

WITNESSETH

WHEREAS, the Company and the Executive are parties to an Employment Agreement made as of January 31, 2006 (the "Employment Agreement," a copy of which is attached hereto as Exhibit A), as amended by amendments dated December 31, 2008 and June 1, 2011, pursuant to which the Executive has served as President, Chief Executive Officer and a Director of the Company; and

WHEREAS, the Company and the Executive desire to amend the Employment Agreement as set forth herein.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Company and the Executive agree as follows:

1. **Term of Employment.** Any contrary provision of the Employment Agreement notwithstanding, on and after the date hereof, the Executive's employment shall be "at will." Any termination of employment either by the Company or by the Executive shall be effected upon delivery of written notice to the other party at least thirty (30) days prior to the date of termination, whether such termination would be characterized as "For Cause", "Without Cause", "Voluntary Termination" or "For Good Reason". Upon any termination of Executive's employment, Executive agrees that he will promptly resign from the Company's Board of Directors and all other positions he may hold with the Company or any of its subsidiaries.

2. **Payments upon Termination.** Upon termination of employment, Executive shall be entitled to receive an amount equal to his accrued base salary or other compensation through the date of termination. In addition, upon termination of employment at any time prior to March 31, 2014, other than a termination by the Company For Cause or Voluntary Termination by Executive, the Company shall (i) make a lump sum payment to Executive equal to $150,000.00[1], and (ii) For the six (6) month period subsequent to the date of termination, the Executive shall continue to receive the disability and medical benefits that he receives as of the date hereof at the same level in effect on, and at the same out-of-pocket cost to the Executive as of, the date hereof. For avoidance of doubt, payment of the amounts and provision of the benefits set forth in the preceding sentence, and the acceleration and extension of Executive's options as set forth in Section 3 below, shall be contingent upon Executive's execution of a release in the form provided in the Employment Agreement.

[1] Note: Equal to 6 mos. base salary as of the date hereof.

3. **Option Acceleration and Exercise.** One Hundred Percent (100%) of the Executive's unvested options shall vest upon termination of employment by the Company Without Cause or by the Executive For Good Reason, and all vested options held by the Executive shall remain exercisable for a period of eighteen months following the date of such termination. The Company shall file a registration statement for the shares underlying Executive's options on Form S-8 within ninety days from the date of termination.

4. **Payment Upon Completion of Renova Transaction.** In the event the Company completes, on or prior to September 30, 2013, a transaction with Renova Industries Ltd. or one or more of its affiliates, as a result of which the Company is released from the use of proceeds restrictions set forth in Section 7.3 of that certain Securities Purchase Agreement dated as of November 1, 2012 by and among the Company and Renova Industries Ltd., the Company pay to the Executive a transaction bonus upon or as soon as practicable following the completion of such transaction equal to $150,000.00[1].

5. **Withholding.** All payments made by the Company hereunder shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

6. **Non-Competition.** The obligation of the Executive to refrain from engaging in business activity in competition with the business of the Company as set out in clause (a) of Section 10 of the Employment Agreement shall be deemed waived as of the date of termination of employment and of no force and effect.

7. **Miscellaneous.** All capitalized terms used and not defined herein shall have the same meaning as in the Employment Agreement, unless the context otherwise requires. Except as may be modified expressly in this Amendment, the Employment Agreement remains in full force and effect. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and in pleading or proving any provision of this Agreement it shall not be necessary to produce more than one such counterpart. A signature sent by telecopy or facsimile transmission shall be as valid and binding upon a Party as an original signature of such Party. This Amendment shall be construed under and be governed in all respects by the laws of The Commonwealth of Massachusetts.

[*Remainder of page intentionally left blank*]

IN WITNESS WHEREOF, this Amendment to Employment Agreement has been executed by the Company, by its duly authorized signatory, and by the Executive, as of the date first above written.

NOVELOS THERAPEUTICS, INC.

By: /s/ Stephen Hill
Name: Stephen Hill
Title: Chairman of the Board of Directors

EXECUTIVE:

/s/ Harry S. Palmin

Harry S. Palmin

EXECUTIVE RETENTION AGREEMENT

This AGREEMENT is made as of July 26, 2013 (the "Effective Date"), by and between Novelos Therapeutics, Inc., a Delaware corporation (the "Company"), with its executive offices located at One Gateway Center, Suite 504, Newton, Massachusetts 02458, and Dr. Christopher J. Pazoles (the "Employee").

WITNESSETH

WHEREAS, the Company desires to retain the services of the Employee; and

WHEREAS, the Company and the Employee desire to set forth the terms and conditions on which, from and after the Effective Date, the Employee is willing to continue in the employ of the Company if the Company will agree to pay to the Employee certain amounts, in accordance with the provisions and conditions hereinafter set forth

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Company and the Employee agree as follows:

1. **Retention**

1.1. **Retention Benefit**. On December 31, 2013, (the "Retention Date") if the Employee is actively employed by the Company as of such date, the Company will pay to the Employee a lump sum retention payment in an aggregate amount equal to $79,560.00[1] (the "Retention Payment"). The Retention Payment shall be payable not later than the tenth day following the Retention Date.

2. **Payments Upon Termination**

2.1. **Severance Benefit**. Upon termination of the Employee's employment by the Company without Cause or by the Employee for Good Reason at any time prior to June 30, 2014 (the "Expiration Date"), so long as the Employee is actively employed by the Company at the time of such termination, the Company will (i) pay to the Employee a lump sum severance payment in an aggregate amount of $132,600.00[2] (the "Severance Payment"), and (ii) for the six (6) month period subsequent to the date of termination, the Employee shall continue to receive the disability and medical benefits that he receives as of the date hereof at the same level in effect on, and at the same out-of-pocket cost to the Employee as of, the date hereof. The Severance Payment shall be payable not later than the tenth day following such termination upon delivery to the Company of a release of any and all claims against the Company, its officers, directors, stockholders, employees and agents in form reasonably satisfactory to the Company.

[1]Equal to 30% Base Salary as of the date hereof.

[2]Equal to six months' Base Salary as of the date hereof.

2.2. **Unavailability of Benefit**. Other than benefits payable pursuant to this Agreement, no benefits will be paid under this Agreement (a) if the Employee is employed by the Company as of the Expiration Date or (b) in the event of termination of the Employee's employment by the Company for Cause or by the Employee without Good Reason.

2.3. **Cause**. For purposes of this Agreement, termination for "Cause" shall mean any of the following:

(a) gross neglect of duties for which employed (*other than* on account of a medically determinable disability which renders the Employee incapable of performing such services);

(b) use of alcohol materially interfering with the performance of the Employee's duties or use of illegal drugs;

(c) commission of any act constituting sexual or any other form of illegal harassment, discrimination or retaliation;

(d) commission of any fraud, misappropriation or embezzlement in the performance of the Employee's duties;

(e) conviction or guilty or nolo plea of a felony or misdemeanor involving moral turpitude, dishonesty, theft, unethical or unlawful conduct; or

(f) willful action or failure to take action which is materially injurious to the Company.

2.4. **Good Reason**. For purposes of this Agreement, the term "Good Reason" shall mean any of the following:

(a) reduction of the Employee's annual base salary and/or aggregate level of incentive compensation and employee benefits;

(b) material change by the Company to the Employee's function, duties, authority, or responsibilities in effect on the date hereof or as set forth in this Agreement, which change would cause the Executive's position with the Company to become one of lesser responsibility, importance, or scope from the position and attributes thereof in effect on the date hereof or as set forth in this Agreement; or

(c) relocation of the Employee's principal place of employment to a location beyond 50 miles of Newton, Massachusetts.

3. **Option Acceleration and Exercise.**

3.1. Upon termination of the Employee prior to the Expiration Date, by the Company without Cause or by the Employee for Good Reason, all unvested options held by the Employee shall be credited with an additional six months vesting and all vested options held by the Employee shall remain exercisable for a period of eighteen months following the date of such termination. The Company shall file a registration statement on Form S-8 for the shares underlying Employee's options within ninety days from the date of termination.

4. **Miscellaneous**.

4.1. **Term and Termination**. The term of this Agreement shall commence on the Effective Date and shall continue until the earliest to occur of (a) the payment of all amounts that may become payable under this Agreement, (b) the Expiration Date, and (c) termination by the parties' mutual written agreement.

4.2. **Independence of Agreement**. The benefits under this Agreement will be independent of, and in addition to, any other Agreement that may exist from time to time between the parties hereto, or any other compensation payable by the Company to the Employee, whether as salary, bonus or otherwise. This Agreement shall not be deemed to constitute a contract of employment between the parties hereto, nor will any provision hereof restrict the right of the Company to discharge the Employee, or restrict the right of the Employee to resign his employment.

4.3. **Definition of "Person"**. For purposes of this Agreement, the term "Person" shall mean an individual, a corporation, an association, a partnership, an estate, a trust and any other entity or organization.

4.4. **Withholding**. All payments made by the Company under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

4.5. **Assignment; Successors and Assigns, etc**. Neither the Company nor the Employee may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other party and without such consent any attempted transfer or assignment shall be null and of no effect; *provided, however*, that the Company may assign its rights under this Agreement without the consent of the Employee in the event either Company shall hereafter effect a reorganization, consolidate with or merge into any other Person, or transfer all or substantially all of its properties or assets to any other Person. This Agreement shall inure to the benefit of and be binding upon the Company and the Employee, and their respective successors, executors, administrators, heirs and permitted assigns. In the event of the Employee's death prior to the completion by the Company of all payments due him under this Agreement, the Company shall continue such payments to the Employee's beneficiary designated in writing to the Company prior to his death (or to his estate, if he or she fails to make such designation).

4.6. **Enforceability**. If any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

4.7. **Waiver**. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

4.8. **Notices**. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by certified mail, postage prepaid, to the Company or the Employee at the last known address or such other address as either party may designate in writing by notice to the other.

4.9. **Amendment**. This Agreement may be amended or modified only by a written instrument signed by the Employee and by a duly authorized representative of the Company.

4.10. **Counterparts; Facsimile Signatures**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and in pleading or proving any provision of this Agreement it shall not be necessary to produce more than one such counterpart. A signature sent by telecopy or facsimile transmission shall be as valid and binding upon a party as an original signature of such party.

4.11. **Governing Law**. This is a Massachusetts contract and shall be construed under and be governed in all respects by the laws of The Commonwealth of Massachusetts.

IN WITNESS WHEREOF, this Agreement has been executed by the Company, by its duly authorized officer, and by the Employee, as of the date first above written.

NOVELOS THERAPEUTICS, INC.

By: /s/ Harry S. Palmin
Name: Harry S. Palmin
Title: Chief Executive Officer

EMPLOYEE:

/s/ Christopher J. Pazoles
Dr. Christopher J. Pazoles

EXECUTIVE RETENTION AGREEMENT

This AGREEMENT is made as of July 26, 2013 (the "Effective Date"), by and between Novelos Therapeutics, Inc., a Delaware corporation (the "Company"), with its executive offices located at One Gateway Center, Suite 504, Newton, Massachusetts 02458, and Joanne M. Protano (the "Employee").

WITNESSETH

WHEREAS, the Company desires to retain the services of the Employee; and

WHEREAS, the Company and the Employee desire to set forth the terms and conditions on which, from and after the Effective Date, the Employee is willing to continue in the employ of the Company if the Company will agree to pay to the Employee certain amounts, in accordance with the provisions and conditions hereinafter set forth

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Company and the Employee agree as follows:

1. **Retention**

1.1. **Retention Benefit**. On December 31, 2013, (the "Retention Date") if the Employee is actively employed by the Company as of such date, the Company will pay to the Employee a lump sum retention payment in an aggregate amount equal to $67,427.00[1] (the "Retention Payment"). The Retention Payment shall be payable not later than the tenth day following the Retention Date.

2. **Payments Upon Termination**

2.1. **Severance Benefit**. Upon termination of the Employee's employment by the Company without Cause or by the Employee for Good Reason at any time prior to June 30, 2014 (the "Expiration Date"), so long as the Employee is actively employed by the Company at the time of such termination, the Company will (i) pay to the Employee a lump sum severance payment in an aggregate amount of $112,378.50[2] (the "Severance Payment"), and (ii) for the six (6) month period subsequent to the date of termination, the Employee shall continue to receive the disability and medical benefits that she receives as of the date hereof at the same level in effect on, and at the same out-of-pocket cost to the Employee as of, the date hereof. The Severance Payment shall be payable not later than the tenth day following such termination upon delivery to the Company of a release of any and all claims against the Company, its officers, directors, stockholders, employees and agents in form reasonably satisfactory to the Company.

[1]Equal to 30% Base Salary as of the date hereof.

[2]Equal to six months' Base Salary as of the date hereof.

2.2. **Unavailability of Benefit**. Other than benefits payable pursuant to Section 1.1 hereof, no benefits will be paid under this Agreement (a) if the Employee is employed by the Company as of the Expiration Date or (b) in the event of termination of the Employee's employment by the Company for Cause or by the Employee without Good Reason.

2.3. **Cause**. For purposes of this Agreement, termination for "Cause" shall mean any of the following:

(a) gross neglect of duties for which employed (*other than* on account of a medically determinable disability which renders the Employee incapable of performing such services);

(b) use of alcohol materially interfering with the performance of the Employee's duties or use of illegal drugs;

(c) commission of any act constituting sexual or any other form of illegal harassment, discrimination or retaliation;

(d) commission of any fraud, misappropriation or embezzlement in the performance of the Employee's duties;

(e) conviction or guilty or nolo plea of a felony or misdemeanor involving moral turpitude, dishonesty, theft, unethical or unlawful conduct; or

(f) willful action or failure to take action which is materially injurious to the Company.

2.4. **Good Reason**. For purposes of this Agreement, the term "Good Reason" shall mean any of the following:

(a) reduction of the Employee's annual base salary and/or aggregate level of incentive compensation and employee benefits;

(b) material change by the Company to the Employee's function, duties, authority, or responsibilities in effect on the date hereof or as set forth in this Agreement, which change would cause the Executive's position with the Company to become one of lesser responsibility, importance, or scope from the position and attributes thereof in effect on the date hereof or as set forth in this Agreement; or

(c) relocation of the Employee's principal place of employment to a location beyond 50 miles of Newton, Massachusetts.

3. **Option Acceleration and Exercise.**

3.1. Upon termination of the Employee prior to the Expiration Date, by the Company without Cause or by the Employee for Good Reason, all unvested options held by the Employee shall be credited with an additional six months vesting and all vested options held by the Employee shall remain exercisable for a period of eighteen months following the date of such termination. The Company shall file a registration statement on Form S-8 for the shares underlying Employee's options within ninety days from the date of termination.

4. **Miscellaneous**.

4.1. **Term and Termination**. The term of this Agreement shall commence on the Effective Date and shall continue until the earliest to occur of (a) the payment of all amounts that may become payable under this Agreement, (b) the Expiration Date, and (c) termination by the parties' mutual written agreement.

4.2. **Independence of Agreement**. The benefits under this Agreement will be independent of, and in addition to, any other Agreement that may exist from time to time between the parties hereto, or any other compensation payable by the Company to the Employee, whether as salary, bonus or otherwise. This Agreement shall not be deemed to constitute a contract of employment between the parties hereto, nor will any provision hereof restrict the right of the Company to discharge the Employee, or restrict the right of the Employee to resign her employment.

4.3. **Definition of "Person"**. For purposes of this Agreement, the term "Person" shall mean an individual, a corporation, an association, a partnership, an estate, a trust and any other entity or organization.

4.4. **Withholding**. All payments made by the Company under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

4.5. **Assignment; Successors and Assigns, etc**. Neither the Company nor the Employee may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other party and without such consent any attempted transfer or assignment shall be null and of no effect; *provided, however*, that the Company may assign its rights under this Agreement without the consent of the Employee in the event either Company shall hereafter effect a reorganization, consolidate with or merge into any other Person, or transfer all or substantially all of its properties or assets to any other Person. This Agreement shall inure to the benefit of and be binding upon the Company and the Employee, and their respective successors, executors, administrators, heirs and permitted assigns. In the event of the Employee's death prior to the completion by the Company of all payments due her under this Agreement, the Company shall continue such payments to the Employee's beneficiary designated in writing to the Company prior to her death (or to her estate, if she fails to make such designation).

4.6. **Enforceability**. If any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

4.7. **Waiver**. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

4.8. **Notices**. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by certified mail, postage prepaid, to the Company or the Employee at the last known address or such other address as either party may designate in writing by notice to the other.

4.9. **Amendment**. This Agreement may be amended or modified only by a written instrument signed by the Employee and by a duly authorized representative of the Company.

4.10. **Counterparts; Facsimile Signatures**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and in pleading or proving any provision of this Agreement it shall not be necessary to produce more than one such counterpart. A signature sent by telecopy or facsimile transmission shall be as valid and binding upon a party as an original signature of such party.

4.11. **Governing Law**. This is a Massachusetts contract and shall be construed under and be governed in all respects by the laws of The Commonwealth of Massachusetts.

IN WITNESS WHEREOF, this Agreement has been executed by the Company, by its duly authorized officer, and by the Employee, as of the date first above written.

NOVELOS THERAPEUTICS, INC.

By: /s/ Harry S. Palmin
Name: Harry S. Palmin
Title: Chief Executive Officer

EMPLOYEE:

/s/ Joanne M. Protano
Joanne M. Protano

CONSULTING AGREEMENT

This AGREEMENT is made as of the 4th day of October, 2013, by and between Novelos Therapeutics, Inc., a Delaware corporation, with its principal executive offices in Newton, Massachusetts and principal offices in Madison, Wisconsin (the "Company"), and Simon Pedder of Fort Mill, South Carolina (the "Consultant").

WITNESSETH

WHEREAS, the Company and the Consultant desire to set forth the terms and conditions on which, from and after the Effective Date, (i) the Consultant shall render services to the Company, and (ii) the Company shall compensate the Consultant for such services;

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Company and the Consultant (individually a "Party" and together the "Parties") agree as follows:

1. **Term**. This Agreement shall be effective on October 4, 2013 (the "Effective Date") and end at the close of business on March 31, 2014. This Agreement may be terminated or extended at any time with the mutual consent of both parties. Either party may terminate this Agreement for any reason; provided, however, that the terminating party shall first provide written notice to the other party at least 15 days prior to the effective date of termination.

2. **Consulting Services**. The Consultant shall serve the Company as Acting Chief Executive Officer. In addition, concurrently with the Effective Date, the Consultant has been elected as a Director of the Company. In such positions, the Consultant shall have the duties, responsibilities and authorities as determined and designated from time to time by the board of directors, including, without limitation, management authority with respect to, and responsibility for, the overall day-to-day business and affairs of the Company (the "Consulting Services"). The Consultant shall serve under the direction and supervision of, and report to, the board of directors. Notwithstanding the above, the Consultant shall not be required to perform any duties and responsibilities which would result in noncompliance with or violation of any applicable law or regulation.

3. **Independent Contractor.** In furnishing the Consulting Services, the Consultant understands that he will at all times be acting as an independent contractor of the Company and, as such, will not be an employee of the Company and will not by reason of this Agreement or by reason of his Consulting Services to the Company be entitled to participate in or to receive any benefit or right under any of the Company's employee benefit or welfare plans. The Consultant also will be responsible for paying all withholding and other taxes required by law to be paid as and when the same become due and payable.

4. **Compensation**. The compensation payable to the Consultant under this Agreement shall be as follows:

4.1. **Consulting Fee**. The Company shall pay the Consultant a consulting fee of $30,000 per month, payable in periodic installments in accordance with the Company's usual practice, but no less frequently than monthly. Said consulting fee shall be inclusive of any Director's fee to which the Consultant would otherwise be entitled and shall be prorated for actual days of service in any month in which this Agreement is terminated.

4.2. **Equity Awards**. The Company shall grant to the Consultant the following equity awards:

(a) An option to purchase up to 3,360,000 shares of the Common Stock, representing approximately five percent (5%) of the outstanding stock and stock options of the Company (the "5% Option"). The exercise price per share shall be equal to the closing market price on the date of grant. The option shall vest in four equal annual installments beginning on the first anniversary of the date of grant. The option shall be evidenced by an option agreement in substantially the form attached hereto as Exhibit A and Schedule I thereto (the "5% Option Agreement"); and

(b) An option to purchase up to 1,925,573 shares of the Common Stock, which option is intended to provide protection against dilution of the 5% Option (the "Anti-Dilution Option") due to the issuance of shares of the Common Stock following the exercise of certain outstanding warrants to purchase the Common Stock. The exercise price per share shall be equal to the greater of $0.75 and the closing market price on the date of grant. The option shall be evidenced by an option agreement in substantially the form attached hereto as Exhibit A and Schedule II thereto (the "Anti-Dilution Option Agreement").

4.3. **Business Expenses**. The Company shall reimburse the Consultant for all reasonable travel and other business expenses incurred by the Consultant in the performance of his duties and responsibilities, including transportation (both local and from home to office) and in connection with the Consultant's general availability to work from the Company's offices in Madison, Wisconsin, subject to such reasonable requirements with respect to substantiation and documentation as may be specified by the Company.

5. **Service**.

5.1. **Extent of Service**. The Consultant shall, subject to the direction and supervision of the board of directors, devote a mutually satisfactory amount of his time, his best efforts and business judgment, his skill and knowledge to the advancement of the Company's interests and to the discharge of his duties and responsibilities hereunder; *provided, however*, that nothing herein shall be construed as preventing the Consultant from:

(a) investing his assets in such form or manner as shall not require any material services on his part in the operations or affairs of the companies or the other entities in which such investments are made;

(b) serving on the board of directors of or as a consultant to any other company, *provided* that he obtains the prior approval of a majority of the board of directors to serve on more than one other board to render any material services with respect to the operations or affairs of any such company; or

(c) engaging in religious, charitable or other community or non-profit activities which do not impair his ability to fulfill his duties and responsibilities under this Agreement.

6. **Confidential Information**. The Consultant understands that the Company continually obtains and develops valuable proprietary and confidential information concerning its technical and business affairs (the "Confidential Information") which may become known to the Consultant in connection with the performance of the Consulting Services.

6.1. The Consultant acknowledges that all Confidential Information, whether or not in writing and whether or not labeled or identified as confidential or proprietary, is and shall remain the exclusive property of the Company or the third party providing such information to the Consultant or the Company. By way of illustration, but not limitation, Confidential Information may include inventions, trade secrets, technical information, know-how, research and development activities of the Company, product and marketing plans, customer and supplier information and information disclosed to the Company or to the Consultant by third parties of a proprietary or confidential nature or under an obligation of confidence. Confidential Information is contained in various media, including patent applications, research data and observations, computer programs in object and/or source code, technical specifications, notebooks, supplier and customer lists, internal financial data and other documents and records of the Company. Confidential Information also shall include all documents, records and other tangible items of any kind in which Confidential Information is stored, maintained or recorded or from which Confidential Information may be readily ascertained or derived (whether in the form of documents, correspondence, memoranda, books, records, files, notes, plans, reports, programs, drawings, sketches, designs, graphics, photographs, prints, mats, films, negatives, recordings, magnetic media, software (whether in source code or object code), disks, diskettes, CD, CD-ROM, electronic files or other media, charts, manuals, materials or any other medium. Such Confidential Information shall include all such information not generally known by the trade or public, even though such information has been disclosed to one or more third parties pursuant to publishing agreements, development agreements, distribution agreements, joint research agreements, confidentiality agreements, disclosure agreements or other agreements or collaborations entered into by any of the Company. The definition of Confidential Information applies equally to information acquired, learned, or disclosed prior to, simultaneously with, or after the date of this Agreement.

6.2. The Consultant agrees that the Consultant shall not, during the term of the Consultant's engagement by the Company and thereafter, publish, disclose or otherwise make available to any third party any Confidential Information except as expressly authorized herein or in writing by the Company. The Consultant may disclose Confidential Information to (i) directors, employees, consultants and representatives of the Company, to (ii) accountants, financial advisors and legal counsel of the Consultant, who have a bona fide need to know such information and who are bound by an obligation not to use or disclose such information without authorization from the Company and to (iii) other parties that enter into confidentiality or non-disclosure agreements with the Company and to whom such Confidential Information will be disclosed for legitimate business purposes of the Company. The Consultant agrees that the Consultant shall use such Confidential Information only in the performance of the Consultant's duties for the Company and in accordance with any Company policies with respect to the protection of Confidential Information. The Consultant agrees not to use such Confidential Information for the Consultant's own benefit or for the benefit of any other person or business entity.

6.3. The Consultant agrees to exercise all reasonable precautions to protect the integrity and confidentiality of Confidential Information in the Consultant's possession and not to remove any materials containing Confidential Information from the Company's premises except to the extent necessary to the Consultant's performance of services for the benefit of the Company. Upon the termination of the Consultant's engagement with the Company, or at any time upon the Company's request, the Consultant shall return immediately to the Company any and all materials containing any Confidential Information then in the Consultant's possession or under the Consultant's control.

6.4. Confidential Information shall not include information which (i) is or becomes generally known within the Company's industry or otherwise through no fault of the Consultant; (ii) was known to the Consultant at the time it was disclosed as evidenced by the Consultant's written records in existence at the time of disclosure; (iii) is lawfully and in good faith made available to the Consultant by a third party who did not derive it from the Company and who imposes no obligation of confidence on the Consultant; or (iv) is required to be disclosed by a governmental authority or by order of a court of competent jurisdiction, provided that the Consultant shall cooperate with the Company at its expense in seeking to obtain all applicable governmental or judicial protection available for like material and provide reasonable advance notice to the Company.

7. **Non-Competition**. As long as the Consultant is retained by the Company and for a period of six (6) months after termination of this Agreement, the Consultant shall not, directly or indirectly, alone or as a partner, officer, director, employee, consultant, agent, or independent contractor of any company or business organization, (a) engage in any business activity which is directly or indirectly in competition with the business of the Company in the area of the development of drugs for the treatment or diagnosis of cancer based on cancer-targeting technologies ("Competitive Activity") or (b) solicit or contact in connection with, or in furtherance of, a Competitive Activity any of the Company's employees, consultants, agents, suppliers, customers, or prospects that were such with respect to the Company at any time during the one year immediately preceding the date of termination or that become such with respect to the Company at any time during the three (3) months immediately following the date of termination. The provisions of this Section 7 shall survive the termination of this Agreement. The Consultant represents and warrants that the covenant imposed by this Section 7 would not cause him an undue hardship.

8. **Specific Performance**. The Consultant agrees that any breach of Sections 6 or 7 of this Agreement by the Consultant could cause irreparable damage and that in the event of such breach the Company shall have, in addition to any and all remedies available at law or in equity, the right to an injunction, specific performance or other equitable relief to prevent the violation of the Consultant's obligations hereunder.

9. **Section 409A of the Code**.

9.1. It is intended that this Agreement comply with or be exempt from Section 409A of the Code and the Treasury Regulations and IRS guidance thereunder (collectively referred to as "Section 409A"). Notwithstanding anything to the contrary in this Agreement, this Agreement shall, to the maximum extent possible, be administered, interpreted, and construed in a manner consistent with Section 409A (it being understood that the Company shall in no event have any obligation to indemnify the Consultant in respect of any taxes incurred under Section 409A). To the extent that any reimbursement, fringe benefit, or other, similar plan or arrangement in which the Consultant participates during the term of this Agreement or thereafter provides for a "deferral of compensation" within the meaning of Section 409A, (a) the amount of expenses eligible for reimbursement provided to the Consultant during any calendar year shall not affect the amount of expenses eligible for reimbursement or in-kind benefits provided to the Consultant in any other calendar year, (b) the reimbursements for expenses for which the Consultant is entitled to be reimbursed shall be made on or before the last day of the calendar year following the calendar year in which the applicable expense is incurred, (c) the right to payment or reimbursement or in-kind benefits hereunder may not be liquidated or exchanged for any other benefit, and (d) the reimbursements shall be made pursuant to objectively determinable and nondiscretionary Company policies and procedures regarding such reimbursement of expenses. If and to the extent required to comply with Section 409A, no payment or benefit required to be paid under this Agreement on account of termination of the Consultant's engagement shall be made unless and until the Consultant incurs a "separation from service" within the meaning of Section 409A. In the case of any amounts payable to the Consultant under this Agreement that may be treated as payable in the form of "a series of installment payments", as defined in Treasury Regulation Section 1.409A-2(b)(2)(iii), the Consultant's right to receive such payments shall be treated as a right to receive a series of separate payments for purposes of such Treasury Regulation. If any paragraph of this Agreement provides for payment within a time period, the determination of when such payment shall be made within such time period shall be solely in the discretion of the Companies.

9.2. If the Consultant is a "specified employee" as determined pursuant to Section 409A as of the date of the Consultant's termination of engagement and if any payment provided for in this Agreement or otherwise both (x) constitutes a "deferral of compensation" within the meaning of Section 409A and (y) cannot be paid or provided in the manner otherwise provided without subjecting the Consultant to additional tax, interest, or penalties under Section 409A, then any such payment shall be delayed until the earlier of (i) the date which is 6 months after the Consultant's "separation from service" within the meaning of Section 409A for any reason other than death, or (ii) the date of the Consultant's death. The provisions of this paragraph shall only apply if, and to the extent, required to avoid the imputation of any tax, penalty, or interest pursuant to Section 409A. Any payment or benefit otherwise payable or to be provided to the Consultant upon or in the 6 month period following the Consultant's "separation from service" that is not so paid or provided by reason of this Section 9 shall be accumulated and paid or provided to the Consultant in a single lump sum, as soon as practicable (and in all events within 15 days) after the date that is 6 months after the Consultant's "separation from service" (or, if earlier, as soon as practicable, and in all events within 15 days, after the date the Consultant's death).

10. **Miscellaneous**.

10.1. **Conflicting Agreements**. The Consultant hereby represents and warrants that the execution of this Agreement and the performance of his obligations hereunder shall not breach or be in conflict with any other agreement to which he is a party or is bound, and that he is not now subject to any covenants against competition or similar covenants which would affect the performance of his obligations hereunder.

10.2. **Definition of "Person"**. For purposes of this Agreement, the term "Person" shall mean an individual, a corporation, an association, a partnership, an estate, a trust and any other entity or organization.

10.3. **Withholding**. All payments made by the Company under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

10.4. **Arbitration**.

(a) Except for claims of fraud or intentional misrepresentation, which shall be filed in any state or federal court having jurisdiction over the parties, any claim regarding the Consultant's ongoing relationship with the Company that is not resolved by mutual agreement shall be resolved solely and exclusively by binding arbitration to be conducted in Chicago, Illinois before a single arbitrator (the "Arbitrator") and shall be conducted in accordance with the American Arbitration Association Rules and Procedures unless specifically modified herein.

(b) The parties covenant and agree that the arbitration shall commence within 90 days of the date on which a written demand for arbitration is filed by any party hereto. In connection with the arbitration proceeding, the Arbitrator shall have the power to order the production of documents by each party and any third-party witnesses. In addition, each party may take up to six depositions as of right, and the Arbitrator may in his or her discretion allow additional depositions upon good cause shown by the moving party. There shall be no interrogatories or requirements for or response to requests for admission but the parties may require production of documents. In connection with any arbitration, each party shall provide to the other, no later than seven (7) business days before the date of the arbitration, the identity of all persons that may testify at the arbitration and a copy of all documents that may be introduced at the arbitration or considered or used by a party's witnesses or experts. The Arbitrator's decision and award shall be made and delivered within six (6) months of the selection of the Arbitrator. The Arbitrator's decision shall set forth a reasoned basis for any award of damages or finding of liability. The Arbitrator shall not have power to award damages in excess of actual compensatory damages and shall not multiply actual damages or award punitive damages or any other damages that are specifically excluded under this Agreement, and each party hereby irrevocably waives any claim to such damages in connection with any such arbitration.

(c) The parties covenant and agree that they will participate in the arbitration in good faith and that they will (i) bear their own attorneys' fees, costs and expenses in connection with the arbitration, and (ii) share equally in the fees and expenses charged by the Arbitrator. Any party unsuccessfully refusing to comply with an order of the Arbitrator shall be liable for costs and expenses, including reasonable attorneys' fees, incurred by the other party in enforcing the award. In the case of temporary or preliminary injunctive relief any party may proceed in court prior to, during or after arbitration for the purpose of avoiding immediate and irreparable harm or to enforce its rights under any non-disclosure, confidentiality or non-competition covenants; provided, that the right to equitable relief by a court is not intended to derogate from this arbitration procedure.

10.5. **Assignment; Successors and Assigns, etc**. Neither the Company nor the Consultant may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other party and without such consent any attempted transfer or assignment shall be null and of no effect; *provided, however,* that the Company may assign its rights under this Agreement without the consent of the Consultant in the event either Company shall hereafter effect a reorganization, consolidate with or merge into any other Person, or transfer all or substantially all of its properties or assets to any other Person. This Agreement shall inure to the benefit of and be binding upon the Company and the Consultant, and their respective successors, executors, administrators, heirs and permitted assigns. In the event of the Consultant's death prior to the completion by the Company of all payments due his under this Agreement, the Company shall continue such payments to the Consultant's beneficiary designated in writing to the Company prior to his death (or to his estate, if he fails to make such designation).

10.6. **Enforceability**. If any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

10.7. **Waiver**. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

10.8. **Notices**. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid, to the Consultant at the last address the Consultant has filed in writing with the Company or, in the case of the Company, at its main office, attention of the board of directors.

10.9. **Amendment**. This Agreement may be amended or modified only by a written instrument signed by the Consultant and by a duly authorized representative of the Company.

10.10. **Counterparts; Facsimile Signatures**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and in pleading or proving any provision of this Agreement it shall not be necessary to produce more than one such counterpart. A signature sent by telecopy or facsimile transmission shall be as valid and binding upon a Party as an original signature of such Party.

10.11. **Governing Law**. This contract and shall be construed under and be governed in all respects by the laws of the State of Delaware without regard to its conflict of laws principles.

* * * * *

IN WITNESS WHEREOF, this Agreement has been executed by the Company, by its duly authorized officer, and by the Consultant, as of the date first above written.

NOVELOS THERAPEUTICS, INC.

By: /s/ Stephen Hill
Name: Stephen Hill
Title: Chairman of the Board of Directors

CONSULTANT:

/s/ Simon Pedder
Simon Pedder

Exhibit A

Non-Qualified Stock Option

Date of Grant: _____, 2013

NON-QUALIFIED STOCK OPTIONS

Granted by

NOVELOS THERAPEUTICS, INC.
(together with its subsidiaries, the "Company")

to

Simon Pedder
(the "Holder")

For valuable consideration, the receipt of which is hereby acknowledged, and pursuant to that certain Consulting Agreement by and between the Holder and the Company (the "Consulting Agreement"), the Company hereby grants to the Holder the following options:

Section 1. **Grant of Options.** Subject to the terms and conditions hereinafter set forth, the Holder is hereby given the rights and options to purchase from the Company shares of the Company's common stock, $.00001 par value per share (the "Common Stock"). Schedule I and Schedule II attached hereto and hereby incorporated herein set forth, with respect to these options, (i) their expiration dates (on which dates the options shall terminate in all respects, and all rights and options to purchase shares hereunder shall terminate), (ii) their exercise prices per share, (iii) the maximum number of shares that the Holder may purchase upon exercise thereof, and (iv) their vesting schedules. They also set forth applicable conditions that the Company incorporates herein. The right to purchase shares hereunder shall be cumulative.

Section 2. **Exercise of Option.** Each option hereunder may be exercised only to the extent such option has vested pursuant to the terms of Section 1. Purchase of any shares hereunder shall be made by delivery to the Company of a written notice of exercise specifying the number of shares with respect to which the option is to be exercised and the address to which the certificate representing such shares is to be mailed, accompanied by either (a) cash, certified or bank check or postal money order payable to the order of the Company for an amount equal to the option price of such shares, (b) if authorized by the Company's Board of Directors (the "Board"), shares of Common Stock of the Company having a fair market value equal to or less than the option price of such shares accompanied by cash or a certified or bank check or postal money order in an amount equal to the difference, if any, between the option price of such shares and the fair market value of such shares, (c) if authorized by the Board, by reducing the number of shares of Common Stock otherwise issuable to the Holder upon exercise of the Option by a number of shares of Common Stock having a fair market value equal to aggregate option price , or (d) if authorized by the Board, any combination of the foregoing. For the purpose of the preceding sentence, the fair market value of the shares of Common Stock so delivered to the Company shall be determined in accordance with procedures adopted by the Board or, if appointed, a committee of the Board authorized to administer Company options (the "Committee").

Section 3. **Conditions and Limitations.** The Holder agrees for a period of 90 days from the effective date of underwritten public offerings of Common Stock of the Company under the Securities Act of 1933, as amended (the "Securities Act"), upon request of the underwriters managing any underwritten offering of the Company's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any shares issued pursuant to the exercise of this option, without the prior written consent of the Company and such underwriters.

Section 4. **Delivery of Shares.** Within a reasonable time following the receipt by the Company of the written notice and payment of the option price for the shares to be purchased thereunder, the Company will deliver or cause to be delivered to the Holder (or if any other individual or individuals are exercising this option, to such individual or individuals) at the address specified pursuant to Section 2 hereof a certificate or certificates for the number of shares with respect to which the option is then being exercised, registered in the name of the Holder (or the name or names of the individual or individuals exercising the option, either alone or jointly with another person or persons with rights of survivorship, as the individual or individuals exercising the option shall prescribe in writing to the Company); provided, however, that such delivery shall be deemed effected for all purposes when a stock transfer agent shall have deposited such certificate or certificates in the United States mail, addressed to the Holder (or such individual or individuals) at the address so specified; and provided further that if any law, regulation or order of the Commission or other body having jurisdiction in the premises shall require the Company or the Holder (or the individual or individuals exercising this option) to take any action in connection with the sale of the shares then being purchased, then, subject to the other provisions of this paragraph, the date on which such sale shall be deemed to have occurred and the date for the delivery of the certificates for such shares shall be extended for the period necessary to take and complete such action, it being understood that the Company shall have no obligation to take and complete any such action.

Section 5. **Adjustments Upon Changes in Capitalization.** The existence of this option shall not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, or any merger or consolidation of the Company, or any issue of bonds, debentures, preferred or prior preference stock ahead of or affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

If the Company shall effect a subdivision or consolidation of shares or other capital readjustment, the payment of a stock dividend, or other increase or reduction of the number of shares of the Common Stock outstanding, without receiving compensation therefor in money, services or property, then the number, class, and per share price of shares of stock subject to this option shall be appropriately adjusted in such a manner as to entitle the Holder to receive upon exercise of this option, for the same aggregate cash consideration, the same total number and class of shares that the owner of an equal number of outstanding shares of Common Stock would own as a result of the event requiring the adjustment.

Except as hereinbefore expressly provided, the issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, for cash or property, or for labor or services, either upon direct sale or upon the exercise of rights or warrants to subscribe therefor, or upon conversion of shares or obligations of the Company convertible into such shares or other securities, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock then subject to this option.

Section 6. **Effect of Certain Transactions.** If the Company is a party to a merger or reorganization with one or more other corporations, whether or not the Company is the surviving or resulting corporation, or if the Company consolidates with or into one or more other corporations, or if the Company is liquidated or sells or otherwise disposes of substantially all its assets to another corporation (each hereinafter referred to as a "Transaction"), in any case while this option remains outstanding, the Board may take one or more of the following actions: (a) provide that after the effective date of such Transaction this option shall remain outstanding and shall be exercisable in shares of Common Stock or, if applicable, shares of such stock or other securities, cash or property as the holders of shares of Common Stock received pursuant to the terms of such Transaction; (b) may accelerate the time for exercise of this option, so that from and after a date prior to the effective date of such Transaction this option shall be exercisable in full; (c) may cancel unexercised options as of the effective date of such Transaction, provided that notice of such cancellation shall be given to the Holder and the Holder shall have the right to exercise this option during a specified period preceding the effective date of such transaction; (d) make or provide for a cash payment to the Holder equal to the difference between (i) the fair market value of the per share consideration (whether cash, securities or other property or any combination of the above) the holder of a share of Common Stock will receive upon consummation of the Transaction (the "Per Share Transaction Price") times the number of shares of Common Stock subject to the vested portion of the Option (to the extent then exercisable at prices not equal to or in excess of the Per Share Transaction Price) and (ii) the aggregate exercise price of such shares, in exchange for the termination of the Option. To the extent that this Option is exercisable at a price equal to or in excess of the Per Share Transaction Price, the Board may provide that the Option shall terminate immediately upon the consummation of the Transaction without any payment being made to the Holder.

Section 7. **Rights of Holder.** No person shall, by virtue of the granting of this option to the Holder, be deemed to be a holder of any shares purchasable under this option or to be entitled to the rights or privileges of a holder of such shares unless and until this option has been exercised with respect to such shares and they have been issued pursuant to that exercise of this option.

The granting of this option shall not impose upon the Company any obligations to employ or to continue to employ the Holder or, if applicable, to continue the Holder as a director of the Company; and the right of the Company to terminate the employment of the Holder shall not be diminished or affected by reason of the fact that this option has been granted to the Holder.

Nothing herein contained shall impose any obligation upon the Holder to exercise this option.

At all times while any portion of this option is outstanding, the Company shall: (i) reserve and keep available, out of shares of its authorized and unissued stock or reacquired shares, a sufficient number of shares of its Common Stock to satisfy the requirements of this option; (ii) comply with the terms of this option promptly upon exercise of the option rights; and (iii) pay all fees or expenses necessarily incurred by the Company in connection with the issuance and delivery of shares pursuant to the exercise of this option.

Section 8. **Tax Withholding.** The Company's obligation to deliver shares upon exercise of this Option shall be subject to the Holder's satisfaction of any federal, state and local income and employment tax withholding requirements.

Section 9. **Transfer and Termination.** This option is not transferable by the Holder otherwise than by will or the laws of descent and distribution, unless approved by the Company in writing.

In the event the Holder ceases to provide consulting services to the Company, except in circumstances where the Holder continues to provide services as an employee of the Company, the Holder's right to exercise any unexercised portion of either Option shall cease immediately and each Option shall terminate.

In the event that after entering into an employment agreement with the Company, the Holder's employment is terminated for any reason by the Company other than for Cause or by the Holder for Good Reason, then each Option shall terminate upon the one year anniversary of the Holder's termination of employment. Until such anniversary the Holder shall have the right to exercise that portion of either Option that was vested as of the date of the Holder's termination of employment, provided, the Holder has delivered any Release contemplated by Holder's employment agreement.

In the event the Holder's employment is terminated by the Company for Cause (as defined below), the Holder's right to exercise any unexercised portion of each Option shall cease immediately as of the date of termination, and each Option shall thereupon terminate. Notwithstanding anything herein to the contrary, if subsequent to the Holder's termination of employment, but prior to the exercise of either Option, the Board of Directors of the Company determines that, either prior or subsequent to the Holder's termination, the Holder engaged in conduct which would constitute Cause, then the Holder shall immediately cease to have any right to exercise either Option and each Option shall thereupon terminate.

In the event the Holder's employment is terminated by Holder other than for Good Reason, the Holder shall have the right to exercise that portion of either Option that was vested at the date of termination of employment for a period of 90 days after such date of termination of employment and each Option shall thereupon terminate.

Section 10. **Definitions for Purposes of this Option Agreement.** For purposes of this agreement:

(a) The term "Cause" shall mean: (i) Holder's dishonesty relating to the Company or its assets (including, without limitation, theft or embezzlement of Company funds or assets); (ii) a material misstatement or misrepresentation by Holder to the Company with respect to his educational and professional background and experience; (iii) Holder's commission of any action with the intent to injure the Company, its business or its assets; (iv) Holder is indicted for any felony, or for any misdemeanor which may interfere with the performance of his duties or responsibilities to the Company; (v) Holder violates any material directive, policy, standard or instruction of the Board with respect to the operation of the Company's business; (vi) Holder fails to obey any direction of the Board which is not illegal; (vii) Holder's willful noncompliance in any material respect with any laws or regulations, foreign or domestic, in the operation of the Company's business; (viii) Holder's material breach of any of his obligations pursuant to any written agreement with the Company or any fiduciary duty arising under law; (ix) Holder's gross negligence or willful misconduct with respect to the business affairs of the Company or with respect to performing his duties or responsibilities under any written agreement with the Company (other than on account of a medically determinable disability which renders the Holder incapable of performing such services); or (x) Holder's unlawful use of alcohol or controlled substances or other drugs.

(b) The term "Good Reason" shall mean: (i) the failure of the board of directors to elect the Holder to the offices of President and Chief Executive Officer, or to continue the Holder in such offices; (ii) the failure by the stockholders of the Company to continue to elect the Holder to the board of directors; (iii) the failure by the Company to pay compensation as provided for in Holder's employment agreement, except for across the board cuts applicable to all officers of the Company on an equal percentage basis; provided that such reduction is approved by the board of directors; (iv) any reduction of Holder's base salary or material reduction in other benefits or any material change by the Company to the Holder's function, duties, authority, or responsibilities, which change would cause the Holder's position with the Company to become one of lesser responsibility, importance, or scope from the position and attributes thereof in effect; and (v) a material breach by the Company of any of the other provisions of Holder's employment agreement.

(c) The term "Change of Control" shall mean: (i) the sale of all or substantially all of the assets or issued and outstanding capital stock of the Company; (ii) merger or consolidation involving the Company in which stockholders of the Company immediately before such merger or consolidation do not own immediately after such merger or consolidation capital stock or other equity interests of the surviving corporation or entity representing more than fifty percent (50%) in voting power of capital stock or other equity interests of such surviving corporation or entity outstanding immediately after such merger or consolidation; or (iii) a change, without the approval of the board of directors, in the composition of the board of directors such that directors who were serving as of the date of the Holder's employment began cease to constitute a majority of the board of directors.

Section 11. **Notice.** Any notice to be given to the Company hereunder shall be deemed sufficient if addressed to the Company and delivered to the office of the Company, One Gateway Center, Suite 504, Newton, MA 02458, attention of the Chairman of the Board of Directors, or such other address as the Company may hereafter designate.

Any notice to be given to the Holder hereunder shall be deemed sufficient if addressed to and delivered in person to the Holder at his address furnished to the Company or when deposited in the mail, postage prepaid, addressed to the Holder at such address.

Section 12. **Governing Law.** This option shall be governed by and construed in accordance with the laws of the State of Delaware.

Section 13. **Date of Grant.** This option shall be effective on the Date of Grant set forth on page 1 hereof.

IN WITNESS WHEREOF, the parties have executed this option, or caused this option to be executed, as of the Date of Grant.

Novelos Therapeutics, Inc.

By: _____

Acknowledged and accepted:

_____

Holder

SCHEDULE I - 5% Option

NOVELOS THERAPEUTICS, INC.

Non-Qualified Stock Option

1.	Name of Holder:	Simon Pedder
2.	Date of Grant:	_____, 2013
3.	Maximum Number of shares for which this Option is exercisable:	3,360,000
4.	Exercise (purchase) price per share:	$_____ (the closing market price on the Date of Grant).
5.	Expiration Date of Option:	_____, 2023 (unless terminated earlier pursuant to Section 9 of the Option).

6. Vesting Schedule:

This Option shall become exercisable in four equal annual installments of 840,000 shares per year beginning on the first anniversary of the Date of Grant, provided that the Holder is engaged or employed by the Company on each such anniversary. All vesting shall cease upon the date of termination of the Holder's engagement or employment with the Company for any reason, *provided, however,* that in the event that after his entering into an employment agreement with the Company, the Holder's employment is terminated either (i) by the Company for any reason other than for Cause (as defined in the Option) or (ii) by the Holder for Good Reason (as defined in the Option), any installment of this Option that would have vested during the one year period following such termination if the Holder had remained employed shall vest upon the date of the termination of the Holder's employment. This Option shall terminate immediately upon termination of the Holder's employment by the Company for Cause.

In the event that within twelve (12) months of a Change in Control (as defined in the Option), either (i) the Company terminates the Holder's employment other than for Cause or (ii) the Holder terminates his own employment for Good Reason then (A) if the Option remained outstanding following such Change in Control, one hundred percent of the unvested portion of the Option shall vest immediately; or (B) to the extent that any unvested portion of the Option was terminated at the time of the Change in Control without any payment to the Holder, a cash payment shall be made to the Holder, upon the date of such termination, equal to the difference between (x) the Per Share Transaction Price times the number of shares of Common Stock subject to such unvested Portion of the Option and (y) the aggregate exercise price of such unvested shares.

7. All shares purchased upon exercise of this Option are subject to the lockup agreement set forth in Section 3 of the Option, and to the other terms of the Option.

Acknowledged and accepted:

_____

Holder

SCHEDULE II - Anti-Dilution Option

NOVELOS THERAPEUTICS, INC.

Non-Qualified Stock Option

1.	Name of Holder:	Simon Pedder
2.	Date of Grant:	_____, 2013
3.	Maximum Number of shares for which this Option is exercisable:	1,925,573
4.	Exercise (purchase) price per share:	The greater of $0.75 and ($_____) the closing market price on the Date of Grant.
5.	Expiration Date of Option:	_____, 20__ (unless terminated earlier pursuant to Section 9 of the Option).

6. Vesting Schedule:

(a) This Option shall become exercisable upon the issuance of shares of Common Stock following the exercise of warrants to purchase Common Stock, issued by the Company prior to March 1, 2013 and representing an aggregate of 36,585,895 shares of Common Stock (each, a "Warrant"); provided that the Holder is employed by the Company at the time of such issuance. One share shall become exercisable for each 19 shares issued upon exercise of a Warrant.

(b) In the event that Common Stock is issued upon the exercise of any Warrant during the period in which the Holder is providing services to the Company pursuant to the Consulting Agreement between the Holder and the Company dated October 4, 2013, and prior to the date on which the Holder becomes an employee of the Company, the Option shall vest as described in subsection (a) above as if the Holder were an employee of the Company at the time of such issuance, but the Holder shall not be entitled to exercise such vested portion of the Option unless and until the Holder becomes an employee of the Company. Such vested portion of the Option shall become exercisable as of the date on which the Holder's employment with the Company commences.

(c) All vesting shall cease upon the date of termination of the Holder's employment for any reason.

7. All shares purchased upon exercise of this Option are subject to the lockup agreement set forth in Section 3 of the Option, and to the other terms of the Option.

Acknowledged and accepted:

_____

Holder

EMPLOYMENT AGREEMENT

This AGREEMENT is made as of the 4th day of October, 2013, by and between Novelos Therapeutics, Inc., a Delaware corporation, with its principal executive offices in Newton, Massachusetts and principal offices in Madison, Wisconsin (the "Company"), and Simon Pedder of Fort Mill, South Carolina (the "Executive").

WITNESSETH

WHEREAS, the Company and the Executive desire to set forth the terms and conditions on which, from and after the Effective Date, (i) the Company shall employ the Executive, (ii) the Executive shall render services to the Company, and (iii) the Company shall compensate the Executive for such services;

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Company and the Executive (individually a "Party" and together the "Parties") agree as follows:

1. **Employment**.

1.1. **Term of Employment**. This Agreement shall be effective on April 1, 2014 or such other date as the Company and the Executive shall mutually agree in writing (the "Effective Date"), and employment hereunder shall be at will. Notwithstanding the foregoing, the term of employment (the "Term") shall end on the date on which the Executive's employment is terminated by either Party in accordance with the provisions herein.

1.2. **Title and Responsibilities**. The Executive shall serve the Company as President and Chief Executive Officer. In addition, the Executive has been elected as a Director of the Company. In such positions, the Executive shall have the duties, responsibilities and authorities as determined and designated from time to time by the board of directors, including, without limitation, management authority with respect to, and responsibility for, the overall day-to-day business and affairs of the Company. The Executive shall serve under the direction and supervision of, and report to, the board of directors. Notwithstanding the above, the Executive shall not be required to perform any duties and responsibilities which would result in noncompliance with or violation of any applicable law or regulation.

2. **Compensation and Benefits**. The compensation and benefits payable to the Executive under this Agreement shall be as follows:

2.1. **Salary**. For all services rendered by the Executive to the Company, the Executive shall be entitled to receive a base salary at the rate of $350,000 per year beginning on the Effective Date. The Executive's base salary shall be reviewed annually by the compensation committee of the board of directors, with the first review no later than the first anniversary of the Effective Date, and shall be subject to increase from time to time as approved by the compensation committee of the board of directors. In addition, if the compensation committee of the board of directors increases the Executive's annual base salary, such increased annual base salary shall become a floor below which such annual base salary shall not fall without the Executive's written consent. Executive's salary shall be payable in periodic installments in accordance with the Company's usual practice for its senior executives, but no less frequently than monthly.

2.2. **Temporary Accommodation**. For the first six (6) months of employment, the Company shall reimburse the Executive for reasonable costs of lodging, meals, transportation (both local and from home to office) and other similar expenses (such costs and expenses not to exceed $4,000 per month) in connection with the Executive's general availability to work from the Company's offices in Madison, Wisconsin.

2.3. **Bonus**. The Executive shall be eligible to receive an annual bonus at the discretion of the compensation committee of the board of directors based on the Executive's performance, which shall not exceed fifty percent (50%) of the Executive's base salary.

2.4. **Equity Awards**. In connection with the execution and delivery of a Consulting Agreement dated October 4th, 2013, the Company has granted to the Executive (i) an option to purchase up to 3,360,000 shares of the Common Stock, representing approximately five percent (5%) of the outstanding stock and stock options of the Company (the "5% Option") and (ii) an option to purchase up to 1,925,573 shares of the Common Stock, which option is intended to provide protection against dilution of the 5% Option (the "Anti-Dilution Option") pursuant to an option agreement (the "Option Agreement"). The Employment Agreement constitutes the continuation of the provision of services of the Executive contemplated by Section 9 of the Option Agreement.

The Executive shall be eligible to receive periodic future stock option grants at the discretion of the board of directors.

2.5. **Regular Benefits**. The Executive shall also be entitled to participate in any and all employee benefit plans, medical insurance plans, disability income plans, retirement plans, bonus incentive plans, and other benefit plans from time to time in effect for senior executives of the Company. Such participation shall be subject to (i) the terms of the applicable plan documents, (ii) generally applicable policies of the Company and (iii) the discretion of the board of directors or any administrative or other committee provided for in or contemplated by such plan.

2.6. **Business Expenses**. The Company shall reimburse the Executive for all reasonable travel and other business expenses incurred by the Executive in the performance of his duties and responsibilities, subject to such reasonable requirements with respect to substantiation and documentation as may be specified by the Company. In no event shall any reimbursement be made later than the last day of the year following the year in which the expenses were incurred.

2.7. **Vacation**. The Executive shall be entitled to five (5) weeks of paid vacation per year, to be taken at such times and intervals as shall be determined by the Executive consistent with his responsibilities.

3. **Service**.

3.1. **Extent of Service**. The Executive shall, subject to the direction and supervision of the board of directors, devote his full time, best efforts and business judgment, skill and knowledge to the advancement of the Company's interests and to the discharge of his duties and responsibilities hereunder; *provided, however*, that nothing herein shall be construed as preventing the Executive from:

(a) investing his assets in such form or manner as shall not require any material services on his part in the operations or affairs of the companies or the other entities in which such investments are made;

(b) serving on the board of directors of any other company, *provided* that he obtains the prior approval of a majority of the board of directors to serve on more than one other board and shall not be required to render any material services with respect to the operations or affairs of any such company; or

(c) engaging in religious, charitable or other community or non-profit activities which do not impair his ability to fulfill his duties and responsibilities under this Agreement.

4. **Termination by the Company**.

4.1. **Termination by Company for Cause**. The Executive's employment hereunder may be terminated by the Company, without further liability on the part of the Company, effective immediately, by the board of directors for Cause (as such term is defined in Section 4.2) by written notice to the Executive setting forth in reasonable detail the nature of such Cause.

4.2. **Definition of Cause**. For purposes of this agreement, "Cause" shall mean:

(a) Executive's dishonesty relating to the Company or its assets (including, without limitation, theft or embezzlement of Company funds or assets);

(b) A material misstatement or misrepresentation by Executive to the Company with respect to his educational and professional background and experience;

(c) Executive's commission of any action with the intent to injure the Company, its business or its assets;

(d) Executive is indicted for any felony, or for any misdemeanor which may interfere with the performance of his duties or responsibilities under this Agreement;

(e) Executive violates any material directive, policy, standard or instruction of the Board with respect to the operation of the Company's business;

(f) Executive fails to obey any direction of the Board which is not illegal;

(g) Executive's willful noncompliance in any material respect with any laws or regulations, foreign or domestic, in the operation of the Company's business;

(h) Executive's material breach of any of his obligations pursuant to this Agreement or any fiduciary duty arising under law;

(i) Executive's gross negligence or willful misconduct with respect to the business affairs of the Company or with respect to performing his duties or responsibilities under this agreement (*other than* on account of a medically determinable disability which renders the Executive incapable of performing such services); or

(j) Executive's unlawful use of alcohol or controlled substances or other drugs.

4.3. **Termination Procedure**. With respect to the circumstances described in clauses (e) through (i) of Section 4.2, a termination by reason of any such circumstances shall be deemed to be for Cause only if such circumstances are not cured by the Executive in all material respects within 30 days following written notice thereof to the Executive, which notice shall identify in reasonable detail the facts that lead the Company to believe that such circumstances exist and shall give Executive an opportunity to response; *provided, however*, that Executive shall be entitled to only one notice and one cure period with respect to each alleged breach. In each case, in determining Cause, the alleged acts or omissions of the Executive shall be measured against standards prevailing in the industry generally and the ultimate existence of Cause must be confirmed by a majority of the board of directors (excluding the Executive) at a meeting prior to any termination therefor. In the event of such a confirmation, the Company shall notify the Executive that the Company intends to terminate the Executive's employment for Cause under this Section 4 (the "Confirmation Notice").

4.4. **Termination of Obligations**. In the event of termination pursuant to Section 4.1, all obligations of the Company under this Agreement, other than the Company's obligations under the provisions of COBRA, shall terminate as of the date specified in the Confirmation Notice, but vested rights of the parties hereunder as of such date shall not be affected.

4.5. **Termination by the Company Without Cause**. The Executive's employment with the Company may be terminated without cause by a majority of the board of directors on five (5) business days prior written notice to the Executive (or, in lieu of such notice, the Executive's base salary for one week), *provided, however*, that the Company shall have the obligation upon any such termination to make the payments to the Executive provided for under Section 6 of this Agreement.

5. **Termination by the Executive**

5.1. **Termination by the Executive for Good Reason**. The Executive shall be entitled to terminate his employment hereunder for Good Reason (as defined in Section 5.3), provided that (i) within 30 days of the first occurrence of one or more of the events listed in Section 5.3 below the Executive delivers to the board of directors written notice of his intention to terminate employment for Good Reason, which notice specifies in reasonable detail the circumstances claimed to give rise to such right, (ii) the Company shall have 30 days after receipt of such notice to cure such circumstances, and (iii) failing a cure, the Executive terminates employment within 10 days after the expiration of the 30 day period set forth in clause (ii).

Upon any such termination, the Executive shall be entitled to receive the benefits set forth in Section 6.

5.2. **Other Voluntary Termination by the Executive**. The Executive may effect, upon thirty (30) days prior written notice to the Company, which notice may be waived by the Company, a Voluntary Termination of his employment hereunder. A "Voluntary Termination" shall mean a termination of employment by the Executive on his own initiative *other than* a termination for Good Reason. If the Executive's employment is so terminated due to Voluntary Termination, the Executive shall be entitled to his base salary up to the date of termination. Provision of medical benefits shall be in accordance with the provisions of COBRA.

5.3. **Good Reason**. For purposes of this Agreement, the term "Good Reason" shall mean any of the following:

(a) the failure of the board of directors to elect the Executive to the offices of President and Chief Executive Officer, or to continue the Executive in such offices;

(b) the failure by the stockholders of the Company to continue to elect the Executive to the board of directors;

(c) the failure by the Company to pay compensation as provided for in Sections 2.1, 2.2, 2.4, 2.5 or 2.6, except for across the board cuts applicable to all officers of the Company on an equal percentage basis; provided that such reduction is approved by the board of directors;

(d) there occurs any reduction of base salary or material reduction in other benefits or any material change by the Company to the Executive's function, duties, authority, or responsibilities in effect on the date hereof or as set forth in this Agreement, which change would cause the Executive's position with the Company to become one of lesser responsibility, importance, or scope from the position and attributes thereof in effect on the date hereof or as set forth in this Agreement (and any such material change shall be deemed a continuing breach of this Agreement); and

(e) a material breach by the Company of any of the other provisions of this Agreement.

5.4. **Change of Control**. For purposes of this Agreement, the term "Change of Control" means (i) the sale of all or substantially all of the assets or issued and outstanding capital stock of the Company, (ii) merger or consolidation involving the Company in which stockholders of the Company immediately before such merger or consolidation do not own immediately after such merger or consolidation capital stock or other equity interests of the surviving corporation or entity representing more than fifty percent (50%) in voting power of capital stock or other equity interests of such surviving corporation or entity outstanding immediately after such merger or consolidation, or (iii) a change, without the approval of the board of directors, in the composition of the board of directors such that directors who were serving as of the date of this Agreement cease to constitute a majority of the board of directors.

6. **Certain Termination Benefits**. In the event of termination pursuant to Section 4.5 or Section 5.1, the Executive shall be entitled to certain benefits (the "Termination Benefits"), subject to the following provisions:

6.1. **Benefits**. The Termination Benefits are:

(a) **Payment of Salary**. For a period of six (6) months following the date of the Executive's termination, the Executive shall continue to receive the installments of base salary set forth in Section 2.1 payable when and as if the Executive had continued to be employed by the Company.

(b) **Option Acceleration and Exercise**. Contingent upon the Executive's execution and delivery of the release discussed below, in the event of a termination pursuant to Sections 4.5 or 5.1, the 5% Option shall be vested as to such number of additional shares of Common Stock as if the Executive had been employed for a period ending on the first anniversary of termination. In the event of such termination within twelve (12) months of Change of Control, one hundred percent (100%) of the Executive's unvested 5% Option shall vest. In either instance the 5% Option shall remain exercisable for a period ending on the first anniversary of termination.

(c) **Benefit Continuation**. For the six (6) month period subsequent to the date of termination, provided that the Executive has elected COBRA coverage, the Company shall pay the portion of the Executive's medical insurance COBRA premium equal to the medical insurance premium paid by the Company for the Executive prior to the date of termination, provided however that the Company in its sole discretion may elect to make a lump sum cash payment equal to the aggregate of such premiums in lieu of paying the premiums.

6.2. **Release and Procedure**. The Company's obligation to make payments pursuant to this Section 6 shall be conditioned upon the Executive's execution of a release in favor of the Company and its affiliates in the form attached hereto as Exhibit A (which the Company agrees to execute and deliver simultaneously), subject to the following provisions.

(a) The Company will deliver the release to the Executive for execution no later than eight days after the Executive's termination of employment.

(b) The Executive must execute and deliver the release within 21 days after receipt thereof.

(c) If the Executive has revocation rights, he shall exercise such rights, if at all, not later than seven days after executing the release.

Subject to the execution and effectiveness of such release, any payments that, pursuant to this Section 6, would otherwise be payable within the 46 day period commencing on termination of employment shall be paid in a lump sum within 10 days after execution of the release; provided that, if the 46 day period begins in one calendar year and ends in the subsequent calendar year, the payment shall be made in the subsequent calendar year.

(d) The failure of the Executive to provide the release within the time periods specified above will relieve the Company of its obligations to make the payments and accelerate the options covered in Section 6.1.

7. **Death, Disability**. The Executive's employment shall terminate immediately upon the death or Disability of the Executive. "Disability" means Executive's failure by reason of sickness, accident or physical or mental disability to substantially perform the duties and responsibilities of his employment with the Company for a period of ninety (90) consecutive days. In the event of termination under this Section 7, the Executive or his estate shall receive the Executive's Pre-Termination Compensation as defined in Section 6.1, and fifty percent (50%) of the Executive's unvested options shall vest and all vested options held by the Executive shall remain exercisable for a period ending of the first anniversary of termination.

8. **Applicability of Section 280G of the Code**.

8.1. **Limitation of Benefit**. In the event that any payment or benefit arising out of or in connection with a change of ownership or effective control of the Company or a substantial portion of its assets within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code", and such change, a "280G Change in Control"), that is made or provided, or to be made or provided, by the Company (or any successors thereto or affiliates thereof) to the Executive, whether pursuant to the terms of this Agreement or any other plan, agreement, or arrangement (any such payment or benefit, a "Parachute Payment") would be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Parachute Payments shall be reduced to the extent necessary to eliminate the imposition of the Excise Tax.

8.2. **Determination**. A determination as to whether any reduction in the Executive's Parachute Payments is required and if so, as to the amount of reduction so required, shall be made by no later than 30 days after the closing of the transaction or the occurrence of the event that constitutes the 280G Change in Control, or as soon thereafter as administratively practicable. Such determination, and the assumptions to be utilized in arriving at such determination, shall be made reasonably and in good faith by the Company.

8.3. **Order of Reductions**. Any reduction in the Parachute Payments required to be made shall be made first with respect to Parachute Payments payable in cash before being made in respect of any Parachute Payments to be provided in the form of benefits or equity award acceleration, and in the form of benefits before being made with respect to equity award acceleration, and in any case, shall be made with respect to such Parachute Payments in inverse order of the scheduled dates or times for the payment or provision of such Parachute Payments.

8.4. **Scope**. For the avoidance of doubt, the provisions of this Section 8 are intended to apply to any and all payments or benefits available to the Executive under this Agreement or any other plan, agreement, or arrangement of the Company under which the Executive may receive Parachute Payments, and shall supersede any contrary language in such plan, agreement, or arrangement.

9. **Confidential Information**. Executive understands that the Company continually obtains and develops valuable proprietary and confidential information concerning its technical and business affairs (the "Confidential Information") which may become known to Executive in connection with Executive's employment by the Company.

9.1. Executive acknowledges that all Confidential Information, whether or not in writing and whether or not labeled or identified as confidential or proprietary, is and shall remain the exclusive property of the Company or the third party providing such information to Executive or the Company. By way of illustration, but not limitation, Confidential Information may include inventions, trade secrets, technical information, know-how, research and development activities of the Company, product and marketing plans, customer and supplier information and information disclosed to the Company or to Executive by third parties of a proprietary or confidential nature or under an obligation of confidence. Confidential Information is contained in various media, including patent applications, research data and observations, computer programs in object and/or source code, technical specifications, notebooks, supplier and customer lists, internal financial data and other documents and records of the Company. Confidential Information also shall include all documents, records and other tangible items of any kind in which Confidential Information is stored, maintained or recorded or from which Confidential Information may be readily ascertained or derived (whether in the form of documents, correspondence, memoranda, books, records, files, notes, plans, reports, programs, drawings, sketches, designs, graphics, photographs, prints, mats, films, negatives, recordings, magnetic media, software (whether in source code or object code), disks, diskettes, CD, CD-ROM, electronic files or other media, charts, manuals, materials or any other medium. Such Confidential Information shall include all such information not generally known by the trade or public, even though such information has been disclosed to one or more third parties pursuant to publishing agreements, development agreements, distribution agreements, joint research agreements, confidentiality agreements, disclosure agreements or other agreements or collaborations entered into by any of the Company. The definition of Confidential Information applies equally to information acquired, learned, or disclosed prior to, simultaneously with, or after the date of this Agreement.

9.2. Executive agrees that Executive shall not, during the term of Executive's engagement by the Company and thereafter, publish, disclose or otherwise make available to any third party any Confidential Information except as expressly authorized herein or in writing by the Company. Executive may disclose Confidential Information to (i) directors, employees, consultants and representatives of the Company, to (ii) accountants, financial advisors and legal counsel of Executive, who have a bona fide need to know such information and who are bound by an obligation not to use or disclose such information without authorization from the Company and to (iii) other parties that enter into confidentiality or non-disclosure agreements with the Company and to whom such Confidential Information will be disclosed for legitimate business purposes of the Company. Executive agrees that Executive shall use such Confidential Information only in the performance of Executive's duties for the Company and in accordance with any Company policies with respect to the protection of Confidential Information. Executive agrees not to use such Confidential Information for Executive's own benefit or for the benefit of any other person or business entity.

9.3. Executive agrees to exercise all reasonable precautions to protect the integrity and confidentiality of Confidential Information in Executive's possession and not to remove any materials containing Confidential Information from the Company's premises except to the extent necessary to Executive's employment for the benefit of the Company. Upon the termination of Executive's employment by the Company, or at any time upon the Company's request, Executive shall return immediately to the Company any and all materials containing any Confidential Information then in Executive's possession or under Executive's control.

9.4. Confidential Information shall not include information which (i) is or becomes generally known within the Company's industry or otherwise through no fault of Executive; (ii) was known to Executive at the time it was disclosed as evidenced by Executive's written records in existence at the time of disclosure; (iii) is lawfully and in good faith made available to Executive by a third party who did not derive it from the Company and who imposes no obligation of confidence on Executive; or (iv) is required to be disclosed by a governmental authority or by order of a court of competent jurisdiction, provided that Executive shall cooperate with the Company at its expense in seeking to obtain all applicable governmental or judicial protection available for like material and provide reasonable advance notice to the Company.

10. **Non-Competition**. In the event of termination, the Executive shall not, for a period of six (6) months after termination, directly or indirectly, alone or as a partner, officer, director, employee, consultant, agent, or independent contractor of any company or business organization, (a) engage in any business activity which is directly or indirectly in competition with the business of the Company in the area of the development of drugs for the treatment or diagnosis of cancer based on cancer-targeting technologies ("Competitive Activity") or (b) solicit or contact in connection with, or in furtherance of, a Competitive Activity any of the Company's employees, consultants, agents, suppliers, customers, or prospects that were such with respect to the Company at any time during the one year immediately preceding the date of termination or that become such with respect to the Company at any time during the three (3) months immediately following the date of termination; *provided, however*, that at the election of the Company, the obligations under this Section 10 shall survive for a period of one (1) year from the termination of employment on condition that the Company provide the Termination Benefits set forth in Section 6.1(a) and (c) for the duration of such period. The provisions of this Section 10 shall survive the termination of this Agreement. The Executive represents and warrants that the covenant imposed by this Section 10 would not cause him an undue hardship.

11. **No Mitigation; No Offset**. In the event of any termination of employment under this Agreement, the Executive shall be under no obligation to seek other employment or to mitigate damages, and there shall be no offset against any amounts due to the Executive under this Agreement for any reason, including, without limitation, on account of any remuneration attributable to any subsequent employment that the Executive may obtain. Any amounts due under this Agreement are in the nature of severance payments or liquidated damages, or both, and are not in the nature of a penalty.

12. **Specific Performance**. The Executive agrees that any breach of Sections 9 or 10 of this Agreement by the Executive could cause irreparable damage and that in the event of such breach the Company shall have, in addition to any and all remedies available at law or in equity, the right to an injunction, specific performance or other equitable relief to prevent the violation of the Executive's obligations hereunder.

13. **Section 409A of the Code**.

13.1. It is intended that this Agreement comply with or be exempt from Section 409A of the Code and the Treasury Regulations and IRS guidance thereunder (collectively referred to as "Section 409A"). Notwithstanding anything to the contrary in this Agreement, this Agreement shall, to the maximum extent possible, be administered, interpreted, and construed in a manner consistent with Section 409A (it being understood that the Company shall in no event have any obligation to indemnify the Executive in respect of any taxes incurred under Section 409A). To the extent that any reimbursement, fringe benefit, or other, similar plan or arrangement in which the Executive participates during the Term or thereafter provides for a "deferral of compensation" within the meaning of Section 409A, (a) the amount of expenses eligible for reimbursement provided to the Executive during any calendar year shall not affect the amount of expenses eligible for reimbursement or in-kind benefits provided to the Executive in any other calendar year, (b) the reimbursements for expenses for which the Executive is entitled to be reimbursed shall be made on or before the last day of the calendar year following the calendar year in which the applicable expense is incurred, (c) the right to payment or reimbursement or in-kind benefits hereunder may not be liquidated or exchanged for any other benefit, and (d) the reimbursements shall be made pursuant to objectively determinable and nondiscretionary Company policies and procedures regarding such reimbursement of expenses. If and to the extent required to comply with Section 409A, no payment or benefit required to be paid under this Agreement on account of termination of the Executive's employment shall be made unless and until the Executive incurs a "separation from service" within the meaning of Section 409A. In the case of any amounts payable to the Executive under this Agreement that may be treated as payable in the form of "a series of installment payments", as defined in Treasury Regulation Section 1.409A-2(b)(2)(iii), the Executive's right to receive such payments shall be treated as a right to receive a series of separate payments for purposes of such Treasury Regulation. If any paragraph of this Agreement provides for payment within a time period, the determination of when such payment shall be made within such time period shall be solely in the discretion of the Companies.

13.2. If the Executive is a "specified employee" as determined pursuant to Section 409A as of the date of the Executive's termination of employment and if any payment or benefit provided for in this Agreement or otherwise both (x) constitutes a "deferral of compensation" within the meaning of Section 409A and (y) cannot be paid or provided in the manner otherwise provided without subjecting the Executive to additional tax, interest, or penalties under Section 409A, then any such payment or benefit shall be delayed until the earlier of (i) the date which is 6 months after the Executive's "separation from service" within the meaning of Section 409A for any reason other than death, or (ii) the date of the Executive's death. The provisions of this paragraph shall only apply if, and to the extent, required to avoid the imputation of any tax, penalty, or interest pursuant to Section 409A. Any payment or benefit otherwise payable or to be provided to the Executive upon or in the 6 month period following the Executive's "separation from service" that is not so paid or provided by reason of this Section 13 shall be accumulated and paid or provided to the Executive in a single lump sum, as soon as practicable (and in all events within 15 days) after the date that is 6 months after the Executive's "separation from service" (or, if earlier, as soon as practicable, and in all events within 15 days, after the date the Executive's death).

14. **Miscellaneous**.

14.1. **Conflicting Agreements**. The Executive hereby represents and warrants that the execution of this Agreement and the performance of his obligations hereunder shall not breach or be in conflict with any other agreement to which he is a party or is bound, and that he is not now subject to any covenants against competition or similar covenants which would affect the performance of his obligations hereunder.

14.2. **Definition of "Person"**. For purposes of this Agreement, the term "Person" shall mean an individual, a corporation, an association, a partnership, an estate, a trust and any other entity or organization.

14.3. **Withholding**. All payments made by the Company under this Agreement shall be net of any tax or other amounts required to be withheld by the Company under applicable law.

14.4. **Arbitration**.

(a) Except for claims of fraud or intentional misrepresentation, which shall be filed in any state or federal court having jurisdiction over the parties, any claim regarding the Executive's ongoing relationship with the Company that is not resolved by mutual agreement shall be resolved solely and exclusively by binding arbitration to be conducted in Chicago, Illinois before a single arbitrator (the "Arbitrator") and shall be conducted in accordance with the American Arbitration Association Rules and Procedures unless specifically modified herein.

(b) The parties covenant and agree that the arbitration shall commence within 90 days of the date on which a written demand for arbitration is filed by any party hereto. In connection with the arbitration proceeding, the Arbitrator shall have the power to order the production of documents by each party and any third-party witnesses. In addition, each party may take up to six depositions as of right, and the Arbitrator may in his or her discretion allow additional depositions upon good cause shown by the moving party. There shall be no interrogatories or requirements for or response to requests for admission but the parties may require production of documents. In connection with any arbitration, each party shall provide to the other, no later than seven (7) business days before the date of the arbitration, the identity of all persons that may testify at the arbitration and a copy of all documents that may be introduced at the arbitration or considered or used by a party's witnesses or experts. The Arbitrator's decision and award shall be made and delivered within six (6) months of the selection of the Arbitrator. The Arbitrator's decision shall set forth a reasoned basis for any award of damages or finding of liability. The Arbitrator shall not have power to award damages in excess of actual compensatory damages and shall not multiply actual damages or award punitive damages or any other damages that are specifically excluded under this Agreement, and each party hereby irrevocably waives any claim to such damages in connection with any such arbitration.

(c) The parties covenant and agree that they will participate in the arbitration in good faith and that they will (i) bear their own attorneys' fees, costs and expenses in connection with the arbitration, and (ii) share equally in the fees and expenses charged by the Arbitrator. Any party unsuccessfully refusing to comply with an order of the Arbitrator shall be liable for costs and expenses, including reasonable attorneys' fees, incurred by the other party in enforcing the award. In the case of temporary or preliminary injunctive relief any party may proceed in court prior to, during or after arbitration for the purpose of avoiding immediate and irreparable harm or to enforce its rights under any non-disclosure, confidentiality or non-competition covenants; provided, that the right to equitable relief by a court is not intended to derogate from this arbitration procedure.

14.5. **Assignment; Successors and Assigns, etc**. Neither the Company nor the Executive may make any assignment of this Agreement or any interest herein, by operation of law or otherwise, without the prior written consent of the other party and without such consent any attempted transfer or assignment shall be null and of no effect; *provided, however,* that the Company may assign its rights under this Agreement without the consent of the Executive in the event either Company shall hereafter effect a reorganization, consolidate with or merge into any other Person, or transfer all or substantially all of its properties or assets to any other Person. This Agreement shall inure to the benefit of and be binding upon the Company and the Executive, and their respective successors, executors, administrators, heirs and permitted assigns. In the event of the Executive's death prior to the completion by the Company of all payments due his under this Agreement, the Company shall continue such payments to the Executive's beneficiary designated in writing to the Company prior to his death (or to his estate, if he fails to make such designation).

14.6. **Enforceability**. If any portion or provision of this Agreement shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

14.7. **Waiver**. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14.8. **Notices**. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid, to the Executive at the last address the Executive has filed in writing with the Company or, in the case of the Company, at its main office, attention of the board of directors.

14.9. **Amendment**. This Agreement may be amended or modified only by a written instrument signed by the Executive and by a duly authorized representative of the Company.

14.10. **Counterparts; Facsimile Signatures**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and in pleading or proving any provision of this Agreement it shall not be necessary to produce more than one such counterpart. A signature sent by telecopy or facsimile transmission shall be as valid and binding upon a Party as an original signature of such Party.

14.11. **Governing Law**. This contract and shall be construed under and be governed in all respects by the laws of the State of Delaware without regard to its conflict of laws principles.

* * * * *

IN WITNESS WHEREOF, this Agreement has been executed by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

NOVELOS THERAPEUTICS, INC.

By: /s/ Stephen Hill
Name: Stephen Hill
Title: Chairman of the Board of Directors

EXECUTIVE:

/s/ Simon Pedder L/S
Simon Pedder

Exhibit A

Release

In consideration of the undertakings by Novelos Therapeutics, Inc. (the "Company") set forth in the Employment Agreement with the undersigned (the "Employee") dated October 4th, 2013, to which this Release is attached as an exhibit (the "Employment Agreement") and for other good and valuable consideration, the receipt of which is hereby acknowledged, Employee, on behalf of himself, his successors, heirs, administrators, executors, assigns, agents, representatives, and all those in privity with him, releases and forever discharges the Company, all of its present and former officers, directors, employees, servants, agents, representatives, shareholders, successors, assigns, and beneficiaries, (collectively, the "Company Releasees"), of and from any and all claims, charges, complaints, causes of action, demands, obligations, liabilities, damages, attorneys fees, expenses, and costs of any kind which Employee now has or ever had arising out of his employment by the Company ("Released Claims"), including but not limited to any causes of action or claims arising under or based on the National Labor Relations Act, as amended; the Civil Rights Act of 1886, 42 U.S.C. § 1981; Section 2 of the Civil Rights Act of 1871, 42 U.S.C. § 1985(c); Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000a et seq., as amended by the Equal Employment Opportunity Act of 1972, 42 U.S.C. § 2000e et seq. and the Civil Rights Act of 1991, 42 U.S.C. § 1981a et seq.; the Equal Pay Act of 1963, 29 U.S.C. §206(d); the Rehabilitation Act of 1973, as amended by the Americans With Disabilities Act and the 1991 Civil Rights Act, 29 U.S.C. §§ 706(8), 791, 793, 794, 794a; the Americans with Disabilities Act of 1990, as amended by the Civil Rights Act of 1991, 42 U.S.C. § 12101 et seq.; the Age Discrimination in Employment Act ("ADEA") of 1967, 29 U.S.C. § 621 et seq.; Executive Order No. 11246, 3 C.F.R. 1964, reprinted as amended in 42 U.S.C. § 2000e; Massachusetts General Laws chapter 151B; Massachusetts General Laws chapter 31; Massachusetts Generals Laws chapter 149; Massachusetts General Laws chapter 151; sections 111.310 through 111.395 of the Wisconsin Statutes; and any other state, federal or municipal equal employment opportunity law, statute, public policy, order, ordinance, or regulation, and any other federal or state law, statute, order, public policy, or regulation affecting or relating to the claims or rights of employees, and any and all Released Claims sounding in tort or contract or otherwise, which Employee had, now has, or claimed to have, known or unknown, against the Company Releasees; *provided, however*, the foregoing release shall not relate to any obligations of the Company arising under (i) the Employment Agreement relating to the payment of severance and other post-termination payments, (ii) any equity award granted by the Company to the Employee, (iii) the 401(k) plan or similar retirement benefit plan of the Company and any agreements thereunder, or (iv) any statute, provision of the Company's certificate of incorporation or by-laws or insurance or other agreement providing indemnification rights to Employee in connection with his services as an officer of the Company.

Employee acknowledges and understands that the consideration Employee is being provided constitutes a full, fair and complete payment for the release and waiver of all possible claims. Employee represents that Employee understands the various claims Employee could have asserted under federal or state law, including but not limited to the Age Discrimination in Employment Act of 1967, as amended by the Older Workers Benefits Protection Act, and other similar laws; that Employee has read this Release carefully and understands all of its provisions; that Employee understands that Employee has the right to and is advised to consult an attorney concerning this Release and in particular the waiver of rights Employee might have under these laws; that to the extent, if any, that Employee desired, Employee availed himself of this right; that Employee has been provided at least twenty-one (21) days to consider whether to sign this Release; that to the extent Employee has signed this Release before the expiration of such twenty-one (21) day period Employee has done so knowingly and willingly; that Employee enters into this Release and waives any claims knowingly and willingly; and that this Release shall become effective seven (7) days after it is signed. Employee may revoke this Release within seven (7) days after it is signed and it shall not become effective or enforceable until this seven (7) day revocation period has expired.

Simon Pedder

Dated: _____, 20____

Exhibit 31.1

I, SIMON PEDDER, 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: November 13, 2013

/s/ Simon Pedder
Simon Pedder, Ph.D.
Acting 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: November 13, 2013

/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 September 30, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Dr. Simon Pedder, Acting 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/ Simon Pedder
Simon Pedder, Ph.D.
Acting Chief Executive Officer (Principal Executive Officer)

Date: November 13, 2013

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

Date: November 13, 2013