U.S. SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-QSB

[mark one]
☒ QUARTERLY REPORT UNDER SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended: June 30, 2007

☐ TRANSITION REPORT UNDER 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 small business issuer as specified in its charter*)

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

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

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

(*Former name, former address, if changed since last report)*

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 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 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: 39,235,272 shares of common stock, $.00001 par value per share, as of August 1, 2007.

Transitional Small Business Disclosure Format (check one): Yes ☐ No ☒

NOVELOS THERAPEUTICS, INC.

10-QSB INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

NOVELOS THERAPEUTICS, INC.
BALANCE SHEETS

	June 30, 2007 (unaudited)	December 31, 2006 (audited)
ASSETS		
CURRENT ASSETS:		
Cash and equivalents	$ 19,287,399	$ 9,938,428
Restricted cash	1,005,323	1,655,251
Prepaid expenses and other current assets	203,310	294,995
Total current assets	20,496,032	11,888,674
FIXED ASSETS, NET	32,600	23,810
DEPOSITS	15,350	10,875
TOTAL ASSETS	$ 20,543,982	$ 11,923,359
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	$ 2,565,699	$ 1,088,041
Accrued compensation	125,791	225,384
Accrued preferred stock dividends	225,000	—
Total current liabilities	2,916,490	1,313,425
COMMITMENTS AND CONTINGENCIES		
REDEEMABLE PREFERRED STOCK:		
Series B convertible preferred stock, $0.00001 par value; 400 shares designated; 300 shares issued and outstanding at June 30, 2007 (liquidation preference $15,000,000)	9,918,666	—
STOCKHOLDERS' EQUITY:		
Preferred Stock, $0.00001 par value; 6,272 authorized: Series A 8% cumulative convertible preferred stock; 3,264 shares issued and outstanding at December 31, 2006 (liquidation preference $3,264,000); Series C 8% cumulative convertible preferred stock; 272 shares issued and outstanding at June 30, 2007 (liquidation preference $3,264,000)	—	—
Common stock, $0.00001 par value; 100,000,000 shares authorized; 39,235,272 shares issued and outstanding at June 30, 2007 and December 31, 2006 (See Note 9)	392	392
Additional paid-in capital	37,996,363	34,294,154
Accumulated deficit	(30,287,929)	(23,684,612)
Total stockholders' equity	7,708,826	10,609,934
TOTAL LIABILITIES, REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY	$ 20,543,982	$ 11,923,359

See notes to financial statements.

NOVELOS THERAPEUTICS, INC.
STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2007	**2006**	**2007**	**2006**
COSTS AND EXPENSES:				
Research and development	$ 3,800,324	$ 1,128,496	$ 5,709,730	$ 1,791,807
General and administrative	636,250	531,142	1,243,972	1,302,640
Total costs and expenses	4,436,574	1,659,638	6,953,702	3,094,447
OTHER INCOME:				
Interest income	213,427	200,784	347,385	280,006
Miscellaneous	1,500	1,500	3,000	3,000
Total other income	214,927	202,284	350,385	283,006
NET LOSS	(4,221,647)	(1,457,354)	(6,603,317)	(2,811,441)
PREFERRED STOCK DIVIDENDS	(290,280)	(66,560)	(355,560)	(130,560)
PREFERRED STOCK DEEMED DIVIDENDS	(9,003,083)	—	(9,003,083)	—
NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS	$ (13,515,010)	$ (1,523,914)	$ (15,961,960)	$ (2,942,001)
BASIC AND DILUTED NET LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS PER COMMON SHARE	$ (0.34)	$ (0.04)	$ (0.41)	$ (0.08)
SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS ATTRIBUTABLE TOCOMMON STOCKHOLDERS PER COMMON SHARE	39,235,272	39,216,261	39,235,272	35,095,002

See notes to financial statements.

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

	Six Months Ended June 30,	
	2007	**2006**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (6,603,317)	$ (2,811,441)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	6,424	4,451
Stock-based compensation	323,384	340,279
Increase (decrease) in:		
Prepaid expenses and other current assets	91,685	154,980
Accounts payable and accrued liabilities	1,477,658	321,248
Accrued compensation	(99,593)	97,025
Cash used in operating activities	(4,803,759)	(1,893,458)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(15,214)	(2,820)
Change in restricted cash	649,928	(2,424)
Deferred financing costs	—	24,612
Deposits	(4,475)	—
Cash provided by investing activities	630,239	19,368
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of Series B convertible preferred stock, net	13,693,051	—
Proceeds from issuance of common stock, net	—	13,846,774
Dividends paid to preferred stockholders	(130,560)	(130,560)
Payment to preferred stockholders in connection with exchange of shares (1)	(40,000)	
Proceeds from exercise of stock option	—	750
Cash provided by financing activities	13,522,491	13,716,964
INCREASE IN CASH AND EQUIVALENTS	9,348,971	11,842,874
CASH AND EQUIVALENTS AT BEGINNING OF YEAR	9,938,428	4,267,115
CASH AND EQUIVALENTS AT END OF PERIOD	$ 19,287,399	$ 16,019,989
SUPPLEMENTAL DISCLOSURE OF NON-CASH ACTIVITIES		
Deemed dividends on preferred stock	$ 8,963,083	$ —
Dividends declared but not paid to preferred stockholders	$ 225,000	$ —
Issuance of warrants to Series B preferred stockholders	$ 3,774,385	$ —
Issuance of warrants to Series C preferred stockholders	$ 1,138,698	$ —
Issuance of warrants to placement agents	$ 768,621	$ —
Common stock issued for services	$ —	$ 136,850

(1) Included as a deemed dividend in the Statement of Operations.

See notes to financial statements.

1. BASIS OF PRESENTATION

The accompanying unaudited financial statements of Novelos Therapeutics, Inc. ("Novelos" or the "Company") have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information and with the instructions to Form 10-QSB and Item 310 of Regulation S-B. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for the fair presentation of these financial statements have been included. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Interim results are not necessarily indicative of results to be expected for other quarterly periods or for the entire year ending December 31, 2007. These unaudited financial statements should be read in conjunction with the audited financial statements and related notes thereto included in the Company's latest annual report for the year ended December 31, 2006 on Form 10-KSB, which was filed with the Securities and Exchange Commission ("SEC") on March 21, 2007.

Cash – Restricted cash consists of approximately $10,000 of cash placed in escrow as contractually required under an employment agreement with an officer and approximately $995,000 of cash pledged as security on a letter of credit agreement with a bank. See Note 8.

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

Reclassifications – Certain amounts in prior periods have been reclassified to conform to the current period presentation.

2. REVERSE MERGER AND REORGANIZATION

During May and June 2005, the Company completed a two-step reverse merger with Common Horizons, Inc. ("Common Horizons"), a Nevada-based developer of web portals, and its wholly-owned subsidiary Nove Acquisition, Inc. Following the reverse merger Novelos became the surviving corporation. Following these transactions, Novelos shareholders owned approximately 83% of the combined company on a fully diluted basis after giving effect to the transactions. The business of Common Horizons, which was insignificant, was abandoned and the business of Novelos was adopted. The transaction was therefore treated as a reverse acquisition recapitalization with Novelos as the acquiring party and Common Horizons as the acquired party for accounting purposes.

3. STOCKHOLDERS' EQUITY

2005 PIPE - From May 27, 2005 through August 9, 2005, the Company completed a private offering of securities structured as a "PIPE" (Private Investment in Public Equity), exempt from registration under the Securities Act of 1933, in which it sold to accredited investors 4,000,000 shares of common stock and issued 2,000,000 common stock warrants (initially exercisable at $2.25 per share) for net cash proceeds of approximately $3,715,000 (net of cash issuance costs of approximately $735,000) and conversion of debt and accrued interest of $550,000. In connection with the private placement, the Company also issued 125,000 shares of common stock to placement agents with a value of approximately $156,000 and issued 340,000 common stock warrants to placement agents and finders at an initial exercise price of $2.00 per share. Pursuant to anti-dilution provisions, the number of warrants issued to investors, placement agents and finders was subsequently increased to 3,139,312 and the exercise price of the warrants was reduced to $1.65 per share as a result of the Series A Preferred financing described below. The 2006 PIPE transaction in March 2006 described below resulted in a further adjustment to the warrants, increasing the number of warrants to 3,836,967 and reducing the exercise price of the warrants to $1.35 per share. The sale of Series B Preferred Stock described below resulted in a further adjustment to the warrants, increasing the number of warrants to 5,180,000 and reducing the exercise price of the warrants to $1.00 per share.

Series A Preferred - On September 30, 2005 and October 3, 2005, the Company sold, in a private placement, a total of 3,200 shares of its Series A 8% Cumulative Convertible Preferred Stock ("Series A Preferred Stock") and 969,696 common stock warrants for net proceeds of $2,864,000, net of issuance costs of $336,000. The preferred shares were originally convertible at a price of $1.65 per common share into 1,939,393 shares of common stock and the warrants were exercisable at $2.00 per share. The Series A Preferred Stock and warrants had anti-dilution provisions that provided for adjustments to the conversion or exercise price, as applicable, upon the occurrence of certain events. Pursuant to these anti-dilution provisions, both the conversion price of the preferred stock and the exercise price of the warrants were subsequently adjusted to $1.35 per share on March 7, 2006 in connection with a subsequent offering of common stock described below (2006 PIPE) and the preferred stock then outstanding became convertible into 2,417,774 shares of common stock. See "Series C Preferred" below for a description of the exchange of Series A Preferred Stock.

2006 PIPE - On March 7, 2006, the Company completed a private offering of securities structured as a PIPE, exempt from registration under the Securities Act of 1933, in which it sold to accredited investors 11,154,073 shares of common stock at $1.35 per share and warrants to purchase 8,365,542 shares of its common stock exercisable at $2.50 per share for net cash proceeds of approximately $13,847,000 (net of issuance costs of approximately $1,211,000, including placement agent fees of approximately $1,054,000). In connection with the private placement, the Company issued 669,244 common stock warrants (exercisable at $2.50 per share) to the placement agents. Pursuant to anti-dilution provisions, the number of warrants issued to investors and placement agents and finders was subsequently increased to 10,270,018 and the exercise price of the warrants was reduced to $2.20 per share as a result of the sale of Series B preferred stock described below.

Series B Preferred - On May 2, 2007, pursuant to a securities purchase agreement with accredited investors dated April 12, 2007 (the "Purchase Agreement"), as amended May 2, 2007, the Company sold 300 shares of a newly created series of preferred stock, designated "Series B Convertible Preferred Stock", with a stated value of $50,000 per share (the "Series B Preferred Stock") and issued warrants to purchase 7,500,000 shares of common stock for an aggregate purchase price of $15,000,000.

Rights and Preferences

The shares of Series B Preferred Stock issued to investors are convertible into shares of common stock at $1.00 per share at any time after issuance at the option of the holder. If there is an effective registration statement covering the shares of common stock underlying the Series B Preferred Stock and the volume-weighted average price ("VWAP"), as defined in the Series B Certificate of Designations, of the Company's common stock exceeds $2.00 for 20 consecutive trading days, then the outstanding Series B Preferred Stock will automatically convert into common stock at the conversion price then in effect. The conversion price is subject to adjustment only for stock dividends, stock splits or similar capital reorganizations. The Series B Preferred Stock has an annual dividend rate of 9%, payable semi-annually on September 30 and March 31. Such dividends may be paid in cash or in registered shares of the Company's common stock at the Company's option. The Series B Preferred Stock ranks senior to all other outstanding series of preferred stock and common stock as to the payment of dividends and the distribution of assets upon voluntary or involuntary liquidation, dissolution or winding up of the Company's affairs. The Series B preferred stockholders will be entitled to receive first, $50,000 per share and all accrued and unpaid dividends. They are then entitled to participate with the holders of the remaining classes of common stock in the distribution of remaining assets on a pro rata basis. If, upon any winding up of the Company's affairs, assets available to pay the holders of Series B Preferred Stock are not sufficient to permit the payment in full, then all assets will be distributed to the holders of Series B Preferred Stock on a pro rata basis. If the Company sells, leases or otherwise transfers substantially all of its assets, consummates a business combination in which the Company is not the surviving corporation or, if the Company is the surviving corporation, if the holders of a majority of the common stock immediately before the transaction do not hold a majority of common stock immediately after the transaction, in one or a series of events, change the majority of the members of the board of directors, or if any person or entity (other than the holders of Series B Preferred Stock) acquires more than 50% of the Company's outstanding stock, then the holders of Series B Preferred Stock are entitled to receive the same liquidation preference as described above, except that after receiving $50,000 per preferred share and any accrued but unpaid dividends, they are not entitled to participate with other classes or common stock in a distribution of the remaining assets.

For as long as any shares of Series B Preferred Stock remain outstanding, the Company is prohibited from (i) paying dividends to common stockholders, (ii) amending the Company's certificate of incorporation (except to increase the number of shares of authorized common stock to 150,000,000), (iii) issuing any equity security or any security convertible into or exercisable for any equity security at a price of $1.00 or less or with rights senior to the Series B Preferred Stock (except for certain exempted issuances), (iv) increasing the number of shares of Series B Preferred Stock or issuing any additional shares of Series B Preferred Stock other than the 400 shares designated in the Series B Certificate of Designations, (v) selling or otherwise disposing of all or substantially all of the Company's assets or intellectual property or entering into a merger or consolidation with another company unless Novelos is the surviving corporation, the Series B Preferred Stock remains outstanding and there are no changes to the rights and preferences of the Series B Preferred Stock, (vi) redeeming or repurchasing any capital stock other than Series B Preferred Stock, (vii) incurring any new debt for borrowed money and (viii) changing the number of the Company's directors. The Company is required to reserve, out of authorized shares of common stock, 125% of the number of shares of common stock into which Series B Preferred Stock is convertible.

Board and Observer Rights

The holders of Series B Preferred Stock are entitled to vote on all matters on which the holders of common stock are entitled to vote. The number of votes to which each holder of Series B Preferred Stock is entitled is equal to the number of shares of common stock that would be issued to such holder if the Series B Preferred Stock had been converted at the record date for the meeting of stockholders.

Pursuant to the Purchase Agreement, from and after the closing of the sale of the Series B Preferred Stock, Xmark Opportunity Fund, Ltd. and its affiliates (the "Xmark Entities"), will have the right to designate one member to the Company's Board of Directors. This right shall last until such time as the Xmark Entities no longer hold at least one-third of the Series B Preferred Stock issued to them at closing. In addition, the Xmark Entities and Caduceus Capital Master Fund Limited and its affiliates (together with the Xmark Entities, the "Lead Investors") will have the right to designate one observer to attend all meetings of the Company's Board of Directors, committees thereof and access to all information made available to members of the Board. This right shall last until such time as the Lead Investors no longer hold at least one-third of the Series B Preferred Stock issued to them. Pursuant to the agreement by holders of Series A Preferred to exchange their shares for shares of Series C Preferred Stock, as described above, the holders of the new Series C preferred stock gave up the right to nominate one person to the Company's Board of Directors, which right they previously held as holders of Series A preferred stock.

Common Stock Purchase Warrants

The common stock purchase warrants issued to investors are exercisable for an aggregate of 7,500,000 shares of the Company's common stock at an exercise price of $1.25 per share and expire in May 2012. If after the first anniversary of the date of issuance of the warrant there is no effective registration statement registering, or no current prospectus available for, the resale of the shares issuable upon the exercise of the warrants, the holder may conduct a cashless exercise whereby the holder may elect to pay the exercise price by having the Company withhold, upon exercise, shares having a fair market value equal to the applicable aggregate exercise price. The warrant exercise price and/or number of warrants is subject to adjustment only for stock dividends, stock splits or similar capital reorganizations so that the rights of the warrant holders after such event will be equivalent to the rights of warrant holders prior to such event. If there is an effective registration statement covering the shares underlying the warrants and the VWAP, as defined in the warrant, of the Company's common stock exceeds $2.25 for 20 consecutive trading days, then on the 31st day following the end of such period any remaining warrants for which a notice of exercise was not delivered shall no longer be exercisable and shall be converted into a right to receive $.01 per share.

Registration Rights Agreement

The Company and the investors entered into a registration rights agreement which required the Company to file with the SEC no later than 30 days following the closing of the transaction, a registration statement covering the resale of a number of shares of common stock equal to 100% of the shares issuable upon conversion of the preferred stock and exercise of the warrants as of the date of filing of the registration statement. The registration statement was filed on May 25, 2007. The registration statement covering these shares must be declared effective by the SEC no later than 120 days following the closing. The Company is required to use its best efforts to keep the registration statement continuously effective under the Securities Act until the earlier of the date when all securities covered by the registration statement have been sold or the second anniversary of the closing. In the event the Company fails to file the registration statement or it is not declared effective within the timeframes specified by the Registration Rights Agreement, the Company is required to pay to the Investors liquidated damages equal to 1.5% per month (pro-rated on a daily basis for any period of less than a full month) of the aggregate purchase price of the preferred stock and warrants until the Company files the delinquent registration statement or the registration statement is declared effective, as applicable. The Company is allowed to suspend the use of the registration statement for not more than 15 consecutive days or for a total of not more than 30 days in any 12-month period without incurring liability for the liquidated damages in certain circumstances.

Placement Agent Agreement

Upon the closing of the preferred stock and warrant financing the Company paid a cash placement agent fee to Rodman & Renshaw LLC ("Rodman") and Rodman's subagent totaling $1,050,000 and issued Rodman and the subagent warrants to purchase a total of 900,000 shares of common stock with the same terms as the warrants issued to the investors.

The Company has agreed to indemnify Rodman from claims arising in relation to the services it provided to the Company in connection with this agreement.

Accounting Treatment

Since the terms of the Series B Preferred Stock contain provisions that may require redemption in circumstances that are beyond the Company's control, the shares have been recorded outside of permanent equity in the balance sheet as of June 30, 2007. Furthermore, since the conversion price of the preferred stock was less than the market value of the Company's common stock at the time of the closing, the Company determined that there was a beneficial conversion feature ("BCF"). After allocating the relative fair value of the warrants issued to investors of $3,774,385 to paid-in-capital, the intrinsic value of the BCF was determined to be $7,824,385. Since the Series B Preferred Stock was immediately convertible, the BCF was recorded as a deemed dividend in the quarter ended June 30, 2007. The fair value of the warrants issued to placement agents at the date of issuance, calculated using the Black-Scholes valuation method, was $1,138,698 and was recorded as a component of permanent equity. The valuation was based on estimated volatility of 80%, a discount rate of 4.55%, and a term of 5 years.

Series C Preferred - As a condition to closing of the sale of Series B Preferred Stock described above, the Company entered into an agreement to exchange and consent with the holders of the Series A Preferred Stock. Pursuant to that agreement, the holders of the Series A Preferred Stock exchanged their 3,264 shares of Series A Preferred Stock for 272 shares of a new Series C convertible preferred stock ("Series C Preferred Stock"), which are subordinated to the Series B Preferred Stock as set forth in the Series C Certificate of Designations. The Series C Preferred Stock is convertible at $1.00 per share into 3,264,000 shares of common stock. As part of the exchange, the Company issued to the holders of the Series A Preferred Stock warrants to purchase 1,333,333 shares of common stock expiring on May 2, 2012 at a price of $1.25 per share; paid them a cash allowance to defray expenses totaling $40,000; and paid them an amount equal to unpaid dividends accumulated through the date of the exchange. The fair value of the warrants at the date of issuance calculated using the Black-Scholes valuation method was $1,138,698. The valuation was based on estimated volatility of 80%, a discount rate of 4.55%, and a term of 5 years. The total of the fair value of the warrants and the cash payment of $40,000 has been reflected as a deemed dividend to preferred stockholders in the statement of operations. Pursuant to the exchange agreement, the holders of the Series C preferred stock retained registration and related rights substantially identical to the rights that they had as holders of the Series A Preferred Stock. Pursuant to the anti-dilution provisions contained in the warrants issued to the holders of the Series A Preferred Stock during 2005, the exercise price of the warrants was reduced to $1.00 in connection with the sale of the Series B Preferred Stock.

The Series C Preferred Stock has an annual dividend rate of 8% until October 1, 2008 and thereafter has an annual dividend rate of 20%. The dividend rate also increases to 20% upon certain events of default as defined in the Series C Certificate of Designations. The dividends are payable quarterly commencing on June 30, 2007. Such dividends shall be paid only after all outstanding dividends on the Series B Preferred Stock (with respect to the current fiscal year and all prior fiscal years) shall have been paid to the holders of the Series B Preferred Stock. The conversion price is subject to adjustment for stock dividends, stock splits or similar capital reorganizations.

Common Stock Warrants — The following table summarizes information with regard to outstanding warrants issued in connection with equity and debt financings as of June 30, 2007:

Offering	Outstanding (as adjusted)		Exercise Price (as adjusted)	Expiration Date
2005 Bridge Loans	720,000	$	0.625	April 1, 2010
2005 PIPE:				
Investors	4,500,000	$	1.00	August 9, 2008
Placement agents and finders	680,000	$	1.00	August 9, 2010
Series A Preferred (1):				
Investors – September 30, 2005 closing	909,090	$	1.00	September 30, 2010
Investors – October 3, 2005 closing	60,606	$	1.00	October 3, 2010
2006 PIPE:				
Investors	9,509,275	$	2.20	March 7, 2011
Placement agents	760,743	$	2.20	March 7, 2011
Series B Preferred:				
Investors	7,500,000	$	1.25	May 2, 2012
Placement agents	900,000	$	1.25	May 2, 2012
Series C Exchange	1,333,333	$	1.25	May 2, 2012
Total	26,873,047			

(1) Following the Series B Financing, the shares of Series A Preferred Stock are now shares of Series C Preferred Stock.

On April 1, 2005, in connection with the issuance of $450,000 bridge notes payable, the Company issued warrants to purchase 720,000 shares of Novelos stock at $0.625 per share that expire in 5 years.

No warrants have been exercised as of June 30, 2007.

Registration Rights - The shares of common stock sold in the 2005 PIPE and the 2006 PIPE and the shares of common stock issuable upon conversion of the Series C Preferred Stock and exercise of certain outstanding warrants have been registered for resale with the Securities and Exchange Commission. Pursuant to the registration rights associated with the financings, if the Company fails to maintain the effectiveness of the registration statements for the periods specified in the agreements, the Company may become obligated to pay liquidated damages to the selling stockholders. The Company believes that an investor claim for liquidated damages relating to these registration rights is not probable and therefore has not accrued for such a contingency at June 30, 2007.

The Company has filed a registration statement covering the shares of common stock issuable upon conversion of Series B Preferred Stock and exercise of warrants issued in connection with the sale of Series B Preferred Stock. As of the date of this filing, the registration statement has not been declared effective. The Company is currently in discussions with the Staff of the Securities and Exchange Commission to resolve the Staff's comments. If the registration statement covering these shares is not declared effective by the Securities and Exchange Commission by August 30, 2007, the Company may become liable for liquidated damages equal to 1.5% per month (pro-rated on a daily basis for any period of less than a full month) of the aggregate purchase price of the preferred stock and warrants until the registration statement is declared effective.

Reserved Shares — At June 30, 2007 the following shares were reserved for future issuance upon exercise of stock options or warrants or conversion of preferred stock:

2000 Stock Option Plan	73,873
2006 Stock Incentive Plan	1,040,000
Options issued outside of formalized plans	2,578,778
Warrants (1)	28,973,047
Preferred stock (1)	22,014,000
Total shares reserved for future issuance	54,679,698

(1) The amount of reserved shares includes shares reserved in excess of the number currently exercisable or convertible in accordance with the related financing agreements.

4. STOCK-BASED COMPENSATION

The Company accounts for stock-based compensation in accordance with the provisions of Statement of Financial Accounting Standards (SFAS) 123R *Share-Based Payment* (SFAS 123R), using the modified-prospective-transition method. SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. SFAS 123R did not change the accounting guidance for share-based payments granted to non-employees provided in SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS 123), as originally issued and Emerging Issues Task Force (EITF) No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*. EITF 96-18 requires that companies recognize compensation 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 by such non-employees. Under the modified-prospective-transition method, compensation cost recognized for all periods presented includes: (a) compensation cost for all stock-based payments granted, but not yet vested as of January 1, 2006, based on the grant-date fair value estimated in accordance with the original provisions of SFAS 123, and (b) compensation cost for all stock-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123R.

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 and restricted stock awards granted to non-employee consultants:

	Three months ended June 30,		Six months ended June 30,	
	2007	2006	2007	2006
Employee and director stock option grants:				
Research and development	$ 63,313	$ 45,615	$ 126,379	$ 91,230
General and administrative	41,819	15,111	83,461	30,222
	105,132	60,726	209,840	121,452
Non-employee consultants stock option grants and restricted stock awards:				
Research and development	4,063	-	21,921	-
General and administrative	51,643	52,035	91,623	218,827
	55,706	52,035	113,544	218,827
Total stock-based compensation	$ 160,838	$ 112,761	$ 323,384	$ 340,279

Determining Fair Value

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 June 30, 2007	Six Months Ended June 30, 2007
Volatility	80%	80%
Weighted-average volatility	80%	80%
Risk-free interest rate	4.59%	4.63%
Expected life (years)	5	5
Dividend	0%	0%
Weighted-average exercise price	$ 1.27	$ 1.04
Weighted-average grant-date fair value	$ 0.85	$ 0.70

There were no option grants in the three and six months ended June 30, 2006.

Stock Option Activity

A summary of stock option activity under the 2000 Plan, the 2006 Plan and outside of any formalized plan is as follows:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contracted Term in Years	Aggregate Intrinsic Value
Outstanding at January 1, 2007	3,492,651	$ 0.70		
Options granted	200,000	$ 1.04		
Outstanding at June 30, 2007	3,692,651	$ 0.72	8.0	$ 1,773,777
Exercisable at June 30, 2007	2,682,649	$ 0.56	7.5	$ 1,773,777

The aggregate intrinsic value of options outstanding is calculated based on the positive difference between the closing market price of the Company's common stock at the end of the respective period and the exercise price of the underlying options.

As of June 30, 2007, there was approximately $494,000 of total unrecognized compensation cost related to unvested share-based compensation arrangements. Of this total amount, 37%, 38% and 25% are expected to be recognized during 2007, 2008 and 2009, respectively. The Company expects 1,010,002 in unvested options to vest in the future. The weighted-average grant-date fair value of vested and unvested options outstanding at June 30, 2007 was $0.31 and $0.73, respectively.

5. NET LOSS PER SHARE

Basic net loss per share is computed by dividing net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing net loss attributable to common stockholders by the weighted-average number of shares of common stock and the dilutive potential common stock equivalents then outstanding. Potential common stock equivalents consist of stock options, warrants and convertible preferred stock. Since the Company has a net loss for all periods presented, the inclusion of potential common stock equivalents in the computation would be antidilutive. Accordingly, basic and diluted net loss per share are the same.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2007	2006	2007	2006
Stock options	3,692,651	2,652,651	3,692,951	2,652,651
Warrants	26,873,047	14,561,449	26,873,047	14,561,449
Conversion of preferred stock	18,264,000	2,417,774	18,264,000	2,417,774

6. INCOME TAXES

The Company accounts for income taxes in accordance with SFAS No. 109, *Accounting for Income Taxes* (SFAS 109). Under SFAS 109, 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 for federal, state or foreign income taxes for the three and six months ended June 30, 2007 and 2006 because the Company has experienced losses since inception. The Company has not recorded a benefit for deferred tax assets as their realizability is uncertain.

7. NEW ACCOUNTING PRONOUNCEMENTS

In June 2007, the Emerging Issues Task Force reached a consensus on Issue No. 07-3 *Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities* (EITF 07-3). EITF 07-3 requires that nonrefundable advance payments for goods or services used or rendered for future research and development activities should be deferred and capitalized and subsequently recognized as an expense as the goods are delivered or the related services are performed. EITF 07-3 is effective for fiscal years beginning after December 15, 2007 and interim periods within those fiscal years with no earlier application permitted. The Company is currently evaluating the effect of this consensus on its future reported financial position and results of operations.

In February 2007, the Financial Accounting Standards Board (FASB) issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities – Including an Amendment to FASB Statement No. 115* (SFAS 159). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. SFAS 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007. Earlier adoption is permitted as of the beginning of a fiscal year that begins on or before November 15, 2007, provided that the entity also elects to apply the provisions of SFAS 157. The Company is currently evaluating the effect of this standard on its future reported financial position and results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS 157), to define fair value, establish a framework for measuring fair value in generally accepted accounting principles and expand disclosures about fair-value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years, with earlier application allowed. The Company is currently evaluating the effect of this standard on its future reported financial position and results of operations.

8. COMMITMENTS AND RELATED PARTY TRANSACTIONS

The Company is obligated to ZAO BAM under a royalty and technology transfer agreement. Mark Balazovsky, a director of the Company until November 2006, is the majority shareholder of ZAO BAM. Pursuant to the royalty and technology transfer agreement between the Company and ZAO BAM, the Company is required to make royalty payments of 1.2% of net sales of oxidized glutathione-based products. The Company is also required to pay ZAO BAM $2 million for each new oxidized glutathione-based drug within eighteen months following FDA approval of such drug.

If a royalty is not being paid to ZAO BAM on net sales of oxidized glutathione products, then the Company is required to pay ZAO BAM 3% of all license revenues. If license revenues exceed the Company's cumulative expenditures including, but not limited to, preclinical and clinical studies, testing, FDA and other regulatory agency submission and approval costs, general and administrative costs, and patent expenses, then the Company would be required to pay ZAO Bam an additional 9% of the amount by which license revenues exceed the Company's cumulative expenditures.

As a result of the assignment to Novelos of the exclusive worldwide intellectual property and marketing rights of oxidized glutathione (excluding Russia and the other states of the former Soviet Union), Novelos is obligated to the Oxford Group, Ltd. for future royalties. The Company's Chairman of the Board of Directors is president of Oxford Group, Ltd. Pursuant to the agreement, as revised May 26, 2005, Novelos is required to pay Oxford Group, Ltd. a royalty in the amount of 0.8% of the Company's net sales of oxidized glutathione-based products.

In July, 2006, the Company entered into a contract with a supplier of pharmaceutical products that will provide chemotherapy drugs to be used in connection with Phase 3 clinical trial activities outside of the United States. Pursuant to the contract, the Company was obligated to purchase a minimum of approximately $2,600,000 of chemotherapy drugs at specified intervals through March 2008. Through June 30, 2007, the Company has purchased approximately $1,800,000 under the contract and as of June 30, 2007, approximately $800,000 is remaining under that commitment. In connection with that agreement, the Company was required to enter into a standby letter of credit arrangement with a bank, expiring in August 2007. The balance on the standby letter of credit at June 30, 2007 equals the remaining purchase commitment of $800,000. In connection with the letter of credit, the Company has pledged cash of approximately $1,000,000 to the bank as collateral on the letter of credit. The pledged cash is included in restricted cash on the balance sheet.

9. SUBSEQUENT EVENT

On July 16, 2007, the Company's shareholders approved and the Company filed an amendment to the articles of incorporation to increase the authorized shares of common stock from 100,000,000 to 150,000,000.

Item 2. Management's Discussion and Analysis or Plan of Operation

Forward-Looking Statements

This quarterly report on Form 10-QSB 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 "critical accounting estimates" and the risk factors set forth below under the caption "Factors That May Affect Future Results." 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 biopharmaceutical company, established in 1996, commercializing oxidized glutathione-based compounds for the treatment of cancer and hepatitis.

NOV-002, our lead compound currently in Phase 3 development for non-small cell lung cancer (NSCLC), acts together with chemotherapy as a chemoprotectant and an immunomodulator. In May 2006, we finalized a Special Protocol Assessment (SPA) with the FDA for a single pivotal Phase 3 trial in advanced NSCLC in combination with first-line chemotherapy, and received Fast Track designation in August 2006. The primary endpoint of this trial is improvement in median overall survival. Patient enrollment commenced in November 2006 and is ongoing. NOV-002 is also in Phase 2 development for chemotherapy-resistant ovarian cancer and early-stage breast cancer and, in addition, is being developed for treatment of acute radiation injury.

NOV-205, our second compound, acts as a hepatoprotective agent with immunomodulating and anti-inflammatory properties. Our Investigational New Drug Application for NOV-205 as monotherapy for chronic hepatitis C has been accepted by the FDA, and a U.S. Phase 1b clinical trial in patients who previously failed treatment with pegylated interferon plus ribavirin is ongoing.

Both compounds have completed clinical trials in humans and have been approved for use in Russia where they were originally developed. We own all intellectual property rights worldwide (excluding Russia and other states of the former Soviet Union) related to compounds based on oxidized glutathione, including NOV-002 and NOV-205. Our patent portfolio includes four U.S. issued patents (plus one notice of allowance), two European issued patents and one Japanese issued patent.

Plan of Operation

Our plan of operation for the next twelve months is to continue the clinical development of our two product candidates. We expect our principal expenditures during those 12 months to include the costs associated with clinical trials. We will continue to maintain a low number of permanent employees and utilize senior advisors, consultants, contract research and manufacturing organizations and third parties to perform certain aspects of product development, including clinical and non-clinical development, manufacturing and, in some cases, regulatory and quality assurance functions. On May 2, 2007 we completed a private placement of our Series B Preferred Stock and warrants with net proceeds of approximately $13,693,000 (net of estimated issuance costs). Based on our current and anticipated spending, we expect that we will be able to fund these activities with existing working capital into the middle of 2008.

Capital Structure and Financings

In 2005 following the settlement of certain of our indebtedness, we completed a two-step reverse merger with Common Horizons, Inc. ("Common Horizons"), a Nevada-based developer of web portals, and its wholly-owned subsidiary Nove Acquisition, Inc. After the completion of the reverse merger Novelos became the surviving corporation, the business of Common Horizons, which was insignificant, was abandoned and the business of Novelos was adopted. The transaction was therefore treated as a reverse acquisition recapitalization with Novelos as the acquiring party and Common Horizons as the acquired party for accounting purposes.

During 2005 and 2006 we completed various private placements of securities. In May through August of 2005 we sold an aggregate of 4,000,000 shares of common stock and warrants to purchase 2,000,000 shares of common stock for net cash proceeds of $3,715,000 and the conversion of $550,000 of convertible debt and accrued interest. In September and October 2005, we sold in a private placement 3,200 shares of Series A preferred stock and warrants to purchase 969,696 shares of common stock for aggregate net proceeds of $2,864,000. On March 7, 2006, we sold 11,154,073 shares of our common stock and warrants to purchase 8,365,542 shares of our common stock for net proceeds of $13,847,000. On May 2, 2007, we sold 300 shares of our Series B preferred stock and warrants to purchase 7,500,000 shares of our common stock for net proceeds of $13,693,000 (net of issuance costs). The shares of Series B Preferred Stock are convertible into 15,000,000 shares of common stock. In connection with that financing, the holders of the existing Series A preferred stock exchanged their 3,264 shares of Series A preferred stock for 272 shares of a new Series C convertible preferred stock which are convertible into 3,264,000 shares of common stock.

Results of Operations

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

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

Three Months Ended June 30, 2007 and 2006

Research and Development. Research and development expense for the three months ended June 30, 2007 was $3,800,000 compared to $1,128,000 for the three months ended June 30, 2006. The $2,672,000, or 237%, increase in research and development expense was due to increased funding of our clinical, contract manufacturing and non-clinical activities. The overall increase resulted principally from expanded activities relating to our pivotal Phase 3 clinical trial of NOV-002 for non-small cell lung cancer. The increase includes $1,280,000 in additional contract research and consulting services, an increase of $761,000 in clinical site expenses, an increase of $91,000 in drug manufacturing costs and an increase of $47,000 related to salaries and overhead costs such as travel and related expenses. Additionally, stock compensation expense increased $22,000 during the second quarter of 2007 as compared to the second quarter of 2006, principally resulting from additional option grants in December 2006. We also purchased $506,000 of chemotherapy drugs during the second quarter of 2007 to be used in the Phase 3 clinical trial, specifically for clinical sites in Eastern and Western Europe. Since we do not anticipate recovering any of the costs of the chemotherapy and we do not have a reliable method for tracking the drugs that have been administered to patients or evaluating any losses associated with spoilage, we recorded the entire amount as an expense in the period purchased. As disclosed in Note 8, we have a commitment to purchase an additional $800,000 of chemotherapy drugs at specified intervals through March 2008. The increases discussed above were offset by a $35,000 decrease in patent costs. During the next twelve months, we expect research and development spending to continue to increase as our clinical trials progress.

General and Administrative. General and administrative expense for the three months ended June 30, 2007 was $636,000 compared to $531,000 for the three months ended June 30, 2006. The $105,000, or 20%, increase in general and administrative expense was primarily due to three factors. First, compensation and related costs and fees to directors increased $62,000 as a result of the hiring of a full-time director of finance, salary increases to administrative personnel, and increases to director fees. Second, overhead costs increased $41,000 principally as a result of increased travel. Third, stock compensation increased by $37,000 due to new option grants during 2006 to employees, directors and consultants. These increases were offset by a $35,000 decrease in the cost associated with legal, accounting and investor relations professional services as we increased our use of internal resources to perform those functions.

Interest Income. Interest income for the three months ended June 30, 2007 was $213,000 compared to $201,000 for the three months ended June 30, 2006. The increase in interest income during 2007 related to higher average cash balances in 2007 as a result of the net proceeds received from the sale of Series B preferred stock on May 2, 2007.

Preferred Stock Dividends and Deemed Dividends. During the quarter ended June 30, 2007 we paid cash dividends to Series A and C preferred stockholders of $65,280 and declared $225,000 of dividends to our Series B preferred stockholders. During the quarter ended June 30, 2007 we also recorded deemed dividends to preferred stockholders totaling $9,003,000. This amount represents the value attributed to the beneficial conversion feature of the Series B convertible preferred stock of $7,824,000 and the fair value of warrants and cash totaling $1,179,000 transferred to the former Series A preferred stockholders in connection with the exchange of their shares for shares of Series C preferred stock that were subordinated to the Series B shares. The deemed dividends and cash dividends have been included in the calculation of net loss attributable to common stockholders of $13,515,000, or $0.34 per share, for the quarter ended June 30, 2007. The deemed dividends and cash dividends are excluded from our net loss (from operating activities) of $4,222,000, or $0.11 per share, for the quarter ended June 30, 2007. There were no deemed dividends in the quarter ended June 30, 2006.

Six Months Ended June 30, 2007 and 2006

Research and Development. Research and development expense for the six months ended June 30, 2007 was $5,710,000 compared to $1,792,000 for the six months ended June 30, 2006. The $3,918,000, or 219%, increase in research and development expense was due to increased funding of our clinical, contract manufacturing and non-clinical activities. The overall increase resulted principally from expanded activities relating to our pivotal Phase 3 clinical trial of NOV-002 for non-small cell lung cancer. The increase includes $2,093,000 in additional contract research and consulting services, an increase of $955,000 in clinical site expenses, an increase of $266,000 in drug manufacturing costs and an increase of $71,000 related to salaries and overhead costs such as travel and related expenses. Additionally, stock compensation expense increased $57,000 during the first six months of 2007 as compared to the first six months of 2007, principally resulting from additional option grants in December 2006. We also purchased $506,000 of chemotherapy drugs during the first half of 2007 to be used in the Phase 3 clinical trial, specifically for clinical sites in Eastern and Western Europe. Since we do not anticipate recovering any of the costs of the chemotherapy and we do not have a reliable method for tracking the drugs that have been administered to patients or evaluating any losses associated with spoilage, we recorded the entire amount as an expense in the period purchased. As disclosed in Note 8, we have a commitment to purchase an additional $800,000 of chemotherapy drugs at specified intervals through March 2008. The increases discussed above were offset by a $30,000 reduction in patent costs. During the next twelve months, we expect research and development spending to continue to increase as our clinical trials progress.

General and Administrative. General and administrative expense for the six months ended June 30, 2007 was $1,244,000 compared to $1,303,000 for the six months ended June 30, 2006. The $59,000, or 5%, decrease in general and administrative expense was due to a decrease of $264,000 in professional and consulting costs associated with legal, accounting and investor-relations professional services as we increased our use of internal resources to perform those functions. This decrease was offset by a $60,000 increase in compensation and related costs and fees to directors as a result of the hiring of a full-time director of finance in the middle of 2006, salary increases to administrative personnel, and increases to director fees. Also, overhead costs increased $82,000 due principally to increases in insurance and travel costs. Lastly, stock compensation increased by $63,000 due to new option grants during 2006 to employees, directors and consultants.

Interest Income. Interest income for the six months ended June 30, 2007 was $347,000 compared to $280,000 for the three months ended June 30, 2006. The increase in interest income during 2007 related to higher average cash balances in 2007 as a result of the net proceeds received from 2006 and 2007 financing transactions.

Preferred Stock Dividends and Deemed Dividends. During the six months ended June 30, 2007 we paid cash dividends to Series A and C preferred stockholders of $130,560 and declared $225,000 of dividends to our Series B preferred stockholders. During the quarter ended June 30, 2007 we also recorded deemed dividends to preferred stockholders totaling $9,003,000. This amount represents the value attributed to the beneficial conversion feature of the Series B convertible preferred stock of $7,824,000 and the fair value of warrants and cash totaling $1,179,000 transferred to the former Series A preferred stockholders in connection with the exchange of their shares for shares of Series C preferred stock that were subordinated to the Series B shares. The deemed dividends and cash dividends have been included in the calculation of net loss attributable to common stockholders of $15,962,000, or $0.41 per share, for the six months ended June 30, 2007. The deemed dividends and cash dividends are excluded from our net loss (from operating activities) of $6,603,000, or $0.17 per share, for the six months ended June 30, 2007. There were no deemed dividends in the first six months of 2006.

Liquidity and Capital Resources

We have financed our operations since inception through the sale of equity securities and the issuance of debt (which was subsequently paid off or converted into equity). As of June 30, 2007, we had $20,293,000 in cash and equivalents, including $1,005,000 of restricted cash that is reserved for research and development activities.

During the six months ended June 30, 2007, cash of approximately $4,804,000 was used in operations, primarily due to a net loss of $6,603,000 and net payment of accrued compensation of $100,000, offset by non-cash stock-based compensation expense of $323,000, depreciation and amortization of $6,000, a decrease in prepaid expenses of $92,000 and an increase in accounts payable and accrued expenses of $1,478,000. During the six months ended June 30, 2007, cash of approximately $630,000 was provided by investing activities resulting from the release of restrictions on $650,000 of cash that had been previously restricted, offset by payments of $15,000 to purchase fixed assets and $5,000 for a lease deposit.

During the six months ended June 30, 2007, cash of approximately $13,522,000 was provided by financing activities as a result of the net proceeds of $13,693,000 from the sale of our Series B preferred stock. This was offset by the payment of cash dividends on the Series A and C cumulative convertible preferred stock totaling $131,000 and a $40,000 payment made in connection with the exchange of Series A preferred shares for Series C preferred shares.

Based on our current and anticipated spending, we believe that our available cash and equivalents, including the net proceeds from the Series B financing, will be sufficient to meet our working capital requirements, including operating losses and capital expenditure requirements, into the middle of 2008, assuming that our business plan is implemented successfully.

We believe, however, that we will need to raise additional capital in order to complete the pivotal Phase 3 clinical trial for NOV-002 and other research and development activities. Furthermore, we may license or acquire other compounds that will require capital for development. We may seek additional funding through collaborative arrangements and public or private financings. Additional funding may not be available to us on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our stockholders. For example, if we raise additional funds by issuing equity securities, further dilution to our existing stockholders may result. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail one or more of our research or development programs. We also could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies, product candidates, or products which we would otherwise pursue on our own.

Even if we are able to raise additional funds in a timely manner, our future capital requirements may vary from what we expect and will depend on many factors, including the following:

- the resources required to successfully complete our clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- continued progress in our research and development programs, as well as the magnitude of these programs;
- the cost of manufacturing activities;
- the costs involved in preparing, filing, prosecuting, maintaining, and enforcing patent claims;
- the timing, receipt, and amount of milestone and other payments, if any, from collaborators; and
- fluctuations in foreign exchange rates.

Commitments

In July 2006, we entered into a contract with a supplier of pharmaceutical products that will provide chemotherapy drugs to be used in connection with Phase 3 clinical trial activities in certain locations outside of the United States. Payments under the contract will be made in Euros and will be funded with available working capital. The minimum remaining commitment under the contract is approximately as follows as of June 30, 2007:

	Payments Due by Period				
	Total	0-12 Months	1 - 3 Years	3 - 5 Years	After 5 Years
Chemotherapy purchase commitment	$ 800,000	$ 800,000	$ -	$ -	$ -

Factors Affecting Future Performance

We may have difficulty raising needed capital because of our limited operating history and our business risks.

We currently generate no revenue from our proposed products or otherwise. We do not know when this will change. We have expended and will continue to expend substantial funds in the research, development and clinical and pre-clinical testing of our drug compounds. We will require additional funds to conduct research and development, establish and conduct clinical and pre-clinical trials, establish commercial-scale manufacturing arrangements and provide for the marketing and distribution of our products. Additional funds may not be available on acceptable terms, if at all. If adequate funding is not available to us, we may have to delay, reduce the scope of or eliminate one or more of our research or development programs or product launches or marketing efforts, which may materially harm our business, financial condition and results of operations.

Our long-term capital requirements are expected to depend on many factors, including:

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

We may consume available resources more rapidly than currently anticipated, resulting in the need for additional funding. 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 otherwise 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 adequate funds are not available, we may be required to significantly reduce or refocus our development efforts with regard to our drug compounds. Currently, we believe that we have available cash sufficient to meet our working capital requirements into the middle of 2008, assuming our expense levels do not exceed our current plan. If we do not generate revenues or raise additional capital, we will not be able to sustain our operations at existing levels beyond that date or earlier if expense levels increase.

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

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

In order to be commercially viable, we must successfully research, develop, obtain regulatory approval for, manufacture, introduce, market and distribute our technologies. For each drug utilizing oxidized glutathione-based compounds, including NOV-002 and NOV-205, we must successfully meet a number of critical developmental milestones including:

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

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

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

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

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

Data obtained from clinical trials is susceptible to varying interpretations, which could delay, limit or prevent regulatory clearances.

Data already obtained, or in the future obtained, from pre-clinical studies and clinical trials does not necessarily predict the results that will be obtained from later pre-clinical studies and clinical trials. Moreover, pre-clinical and clinical data are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. The failure to adequately demonstrate the safety and effectiveness of an intended product under development could delay or prevent regulatory clearance of the potential drug, resulting in delays to commercialization, and could materially harm our business. Our clinical trials may not demonstrate sufficient levels of safety and efficacy necessary to obtain the requisite regulatory approvals for our drugs, and our proposed drugs may not be approved for marketing.

We may encounter delays or rejections based on additional government regulation from future legislation or administrative action or changes in FDA policy during the period of development, clinical trials and FDA regulatory review. We may encounter similar delays in foreign countries. Sales of our products outside the U.S. would be subject to foreign regulatory approvals that vary from country to country. The time required to obtain approvals from foreign countries may be shorter or longer than that required for FDA approval, and requirements for foreign licensing may differ from FDA requirements. We may be unable to obtain requisite approvals from the FDA and foreign regulatory authorities, and even if obtained, such approvals may not be on a timely basis, or they may not cover the uses that we request.

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

Our drugs or technology may not gain FDA approval in clinical trials or be effective as a therapeutic agent, which could affect our future profitability and prospects.

In order to obtain regulatory approvals, we must demonstrate that each drug is safe and effective for use in humans and functions as a therapeutic against the effects of a disease or other physiological response. To date, studies conducted in Russia involving our NOV-002 and NOV-205 products have shown what we believe to be promising results. In fact, NOV-002 has been approved for use in Russia for general medicinal use as an immunostimulant in combination with chemotherapy and antimicrobial therapy, and specifically for indications such as tuberculosis and psoriasis. NOV-205 has been approved in Russia as a monotherapy agent for the treatment of hepatitis B and C. Russian regulatory approval is not equivalent to FDA approval. Pivotal Phase 3 studies with a large number of patients, typically required for FDA approval, were not conducted for NOV-002 and NOV-205 in Russia. Further, all of our Russian clinical studies were completed prior to 2000 and may not have been conducted in accordance with current guidelines either in Russia or the United States.

A U.S.-based Phase 1/2 clinical study involving 44 non-small cell lung cancer patients provided what we believe to be a favorable outcome. As a result, we enrolled the first patient in the Phase 3 study of NOV-002 for non-small cell lung cancer in November 2006 and are continuing to enroll patients. We enrolled the first patient in the Phase 2 clinical study for NOV-002 for chemotherapy-resistant ovarian cancer in July 2006 and announced encouraging results from this ongoing study in June 2007. We enrolled the first patient in the Phase 1b clinical study for NOV-205 for chronic hepatitis C in September 2006 and we anticipate completing that study by the end of 2007. There can be no assurance that we can demonstrate that these products are safe or effective in advanced clinical trials. We are also not able to give assurances that the results of the tests already conducted can be repeated or that further testing will support our applications for regulatory approval. As a result, our drug and technology research program may be curtailed, redirected or eliminated at any time.

There is no guarantee that we will ever generate substantial revenue or become profitable even if one or more of our drugs are approved for commercialization.

We expect to incur increasing operating losses over the next several years as we incur increasing costs for research and development and clinical trials. Our ability to generate revenue and achieve profitability depends on our ability, alone or with others, to complete the development of our proposed products, obtain the required regulatory approvals and manufacture, market and sell our proposed products. Development is costly and requires significant investment. In addition, if we choose to license or obtain the assignment of rights to additional drugs, the license fees for such drugs may increase our costs.

To date, we have not generated any revenue from the commercial sale of our proposed products or any drugs and do not expect to receive such revenue in the near future. Our primary activity to date has been research and development. A substantial portion of the research results and observations on which we rely were performed by third parties at those parties' sole or shared cost and expense. We cannot be certain as to when or whether to anticipate commercializing and marketing our proposed products in development, and do not expect to generate sufficient revenues from proposed product sales to cover our expenses or achieve profitability in the near future.

We rely solely on research and manufacturing facilities at various universities, hospitals, contract research organizations and contract manufacturers for all of our research, development, and manufacturing, which could be materially delayed should we lose access to those facilities.

At the present time, we have no research, development or manufacturing facilities of our own. We are entirely dependent on contracting with third parties to use their facilities to conduct research, development and manufacturing. Our inability to have the facilities to conduct research, development and manufacturing may delay or impair our ability to gain FDA approval and commercialization of our drug delivery technology and products.

We currently maintain a good working relationship with such contractors. Should the situation change and we are required to relocate these activities on short notice, we do not currently have an alternate facility where we could relocate our research, development and/or manufacturing activities. The cost and time to establish or locate an alternate research, development and/or manufacturing facility to develop our technology would be substantial and would delay gaining FDA approval and commercializing our products.

We are dependent on our collaborative agreements for the development of our technologies and business development, which expose us to the risk of reliance on the viability of third parties.

In conducting our research, development and manufacturing activities, we rely and expect to continue to rely on numerous collaborative agreements with universities, hospitals, governmental agencies, charitable foundations, manufacturers and others. The loss of or failure to perform under any of these arrangements, by any of these entities, may substantially disrupt or delay our research, development and manufacturing activities including our anticipated clinical trials.

We may rely on third-party contract research organizations, service providers and suppliers to support development and clinical testing of our products. Failure of any of these contractors to provide the required services in a timely manner or on reasonable commercial terms could materially delay the development and approval of our products, increase our expenses and materially harm our business, financial condition and results of operations.

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

Our business exposes us to potential product liability and other liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. We cannot assure that such potential claims will not be asserted against us. In addition, the use in our clinical trials of pharmaceutical products that we may develop and then subsequently sell or our potential collaborators may develop and then subsequently sell may cause us to bear a portion of or all product liability risks. A successful liability claim or series of claims brought against us could have a material adverse effect on our business, financial condition and results of operations.

Although we have not received any product liability claims to date, we have an insurance policy of $5,000,000 per occurrence and $5,000,000 in the aggregate to cover such claims should they arise. There can be no assurance that material claims will not arise in the future or that our insurance will be adequate to cover all situations. Moreover, there can be no assurance that such insurance, or additional insurance, if required, will be available in the future or, if available, will be available on commercially reasonable terms. Any product liability claim, if successful, could have a material adverse effect on our business, financial condition and results of operations. Furthermore, our current and potential partners with whom we have collaborative agreements or our future licensees may not be willing to indemnify us against these types of liabilities and may not themselves be sufficiently insured or have a net worth sufficient to satisfy any product liability claims. Claims or losses in excess of any product liability insurance coverage that may be obtained by us could have a material adverse effect on our business, financial condition and results of operations.

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

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

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

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

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

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

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

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

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

The patent positions of biotechnology and pharmaceutical companies, including us, that involve licensing agreements, are frequently uncertain and involve complex legal and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued or in subsequent legal proceedings. Consequently, our patent applications and any issued and licensed patents may not provide protection against competitive technologies or may be held invalid if challenged or circumvented. Our competitors may also independently develop products similar to ours or design around or otherwise circumvent patents issued or licensed to us. In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as U.S. law.

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

Although our trade secrets and technical know-how are important, our continued access to the patents is a significant factor in the development and commercialization of our products. Aside from the general body of scientific knowledge from other drug delivery processes and technology, these patents, to the best of our knowledge and based on our current scientific data, are the only intellectual property necessary to develop our products, including NOV-002 and NOV-205. We do not believe that we are or will be violating any patents in developing our technology.

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

We have limited manufacturing experience and, if our products are approved, we may not be able to manufacture sufficient quantities at an acceptable cost, or may be subject to risk that contract manufacturers could experience shut-downs or delays.

We remain in the research and development and clinical and pre-clinical trial phase of product commercialization. Accordingly, if our products are approved for commercial sale, we will need to establish the capability to commercially manufacture our products in accordance with FDA and other regulatory requirements. We have limited experience in establishing, supervising and conducting commercial manufacturing. If we fail to adequately establish, supervise and conduct all aspects of the manufacturing processes, we may not be able to commercialize our products.

We presently plan to rely on third-party contractors to manufacture our products. This may expose us to the risk of not being able to directly oversee the production and quality of the manufacturing process. Furthermore, these contractors, whether foreign or domestic, may experience regulatory compliance difficulties, mechanical shutdowns, employee strikes or other unforeseeable acts that may delay production.

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

We have not yet had to establish marketing, sales or distribution capabilities for our proposed products. Until such time as our products are further along in the regulatory process, we will not devote any meaningful time and resources to this effort. At the appropriate time, we intend to enter into agreements with third parties to sell our products or we may develop our own sales and marketing force. We may be unable to establish or maintain third-party relationships on a commercially reasonable basis, if at all. In addition, these third parties may have similar or more established relationships with our competitors.

If we do not enter into relationships with third parties for the sale and marketing of our products, we will need to develop our own sales and marketing capabilities. We have limited experience in developing, training or managing a sales force. If we choose to establish a direct sales force, we may incur substantial additional expenses in developing, training and managing such an organization. We may be unable to build a sales force on a cost-effective basis or at all. Any such direct marketing and sales efforts may prove to be unsuccessful. In addition, we will compete with many other companies that currently have extensive marketing and sales operations. Our marketing and sales efforts may be unable to compete against these other companies. We may be unable to establish a sufficient sales and marketing organization on a timely basis, if at all.

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

- fail to satisfy financial or contractual obligations to us;

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

If we fail to develop sales, marketing and distribution channels, we would experience delays in product sales and incur increased costs, which would harm our financial results.

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

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

Fluctuations in foreign exchange rates could increase costs to complete international clinical trial activities.

We have initiated a portion of our clinical trial activities in Europe and Eastern Europe. We anticipate that approximately 40% of the overall Phase 3 clinical trial budget of approximately $35 million will be incurred in Euros. Significant depreciation in the value of the U.S. Dollar against principally the Euro could adversely affect our ability to complete the trials, particularly if we are unable to redirect funding or raise additional funds. Since the timing and amount of foreign-denominated payments are uncertain and dependent on a number of factors, it is difficult to cost-effectively hedge the potential exposure. Therefore, to date, we have not entered into any foreign currency hedges to mitigate the potential exposure.

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

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

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

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

If users of our products are unable to obtain adequate reimbursement from third-party payers, or if new restrictive legislation is adopted, market acceptance of our products may be limited and we may not achieve anticipated revenues.

The continuing efforts of government and insurance companies, health maintenance organizations and other payers of healthcare costs to contain or reduce costs of health care may affect our future revenues and profitability, and the future revenues and profitability of our potential customers, suppliers and collaborative partners and the availability of capital. For example, in certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. In the United States, given recent federal and state government initiatives directed at lowering the total cost of health care, the U.S. Congress and state legislatures will likely continue to focus on healthcare reform, the cost of prescription pharmaceuticals and on the reform of the Medicare and Medicaid systems. While we cannot predict whether any such legislative or regulatory proposals will be adopted, the announcement or adoption of such proposals could materially harm our business, financial condition and results of operations.

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

We depend on key personnel who may terminate their employment with us at any time, and we would need to hire additional qualified personnel.

Our success will depend to a significant degree on the continued services of key management and advisors to us. There can be no assurance that these individuals will continue to provide service to us. In addition, our success will 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.

Compliance with changing corporate governance and public disclosure regulations may result in additional expense.

Keeping abreast of, and in compliance with, changing laws, regulations and standards relating to corporate governance, public disclosure and internal controls, including the Sarbanes-Oxley Act of 2002, new SEC regulations and, in the event we seek and are approved for listing on a registered national securities exchange, the stock exchange rules will require an increased amount of management attention and external resources. We intend to continue to invest all reasonably necessary resources to comply with evolving standards, which may result in increased general and administrative expense and a diversion of management time and attention from revenue-generating activities to compliance activities. Beginning with our annual report for the fiscal year ending December 31, 2007 we will be required to include a report of our management on internal control over financial reporting. Further, in our annual report for the fiscal year ending December 31, 2008 we will be required to include an attestation report of our independent registered public accounting firm on internal control over financial reporting.

Our executive officers, directors and principal stockholders have substantial holdings, which could delay or prevent a change in corporate control favored by our other stockholders.

Our directors, officers, 5% stockholders and other principal stockholders (including the voting shares associated with our Series B preferred stock) beneficially own, in the aggregate, approximately 50% of our outstanding voting shares. The interests of our current officers and directors may differ from the interests of other stockholders. Further, our current officers and directors may have the ability to significantly affect the outcome of all corporate actions requiring stockholder approval, including the following actions:

- the election of directors;
- the amendment of charter documents;

- issuance of blank-check preferred or convertible stock, notes or instruments of indebtedness which may have conversion, liquidation and similar features, or completion of other financing arrangements; or

- the approval of certain mergers and other significant corporate transactions, including a sale of substantially all of our assets, or merger with a publicly-traded shell or other company.

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

In the past, we have issued common stock, convertible securities, such as convertible preferred stock, and warrants in order to raise money. We have also issued options and warrants as compensation for services and incentive compensation for our employees and directors. We have shares of common stock reserved for issuance upon the conversion and exercise of these securities and may increase the shares reserved for these purposes in the future. Our issuance of additional common stock, convertible securities, options and warrants could affect the rights of our stockholders, and could reduce the market price of our common stock.

We are prohibited from taking certain actions and entering into certain transactions as a result of the issuance of our Series B preferred stock.

For as long as any shares of Series B Preferred Stock remain outstanding we are prohibited from taking certain actions or entering into certain transactions without the prior consent of the holders of outstanding shares of Series B preferred stock. We are prohibited from paying dividends to common stockholders, amending our certificate of incorporation (except to increase the number of shares of authorized common stock to 150,000,000), issuing any equity security or any security convertible into or exercisable for any equity security at a price of $1.00 or less or with rights senior to the Series B Preferred Stock (except for certain exempted issuances), increasing the number of shares of Series B Preferred Stock or issuing any additional shares of Series B Preferred Stock other than the 400 shares designated in the Series B Certificate of Designations, or changing the number of our directors. We are also prohibited from entering into certain transactions such as selling or otherwise disposing of all or substantially all of our assets or intellectual property or entering into a merger or consolidation with another company unless we are the surviving corporation, the Series B Preferred Stock remains outstanding and there are no changes to the rights and preferences of the Series B Preferred Stock, redeeming or repurchasing any capital stock other than Series B Preferred Stock, or incurring any new debt for borrowed money.

If the board of directors determines that any of these actions are in the best interest of the Company or our shareholders, we may be unable to complete them if we do not get the approval of the holders of the outstanding shares of Series B preferred stock.

Amendment No. 2 to our Registration Statement on Form SB-2 has been reviewed by the Securities and Exchange Commission Staff (the "Staff") and there are Staff comments that are unresolved as of the date of this filing.

In connection with the private placement of Series B Preferred Stock and warrants that closed on May 2, 2007, we entered into a registration rights agreement with the investors which required the Company to file with the SEC no later than 30 days following the closing of the transaction, a registration statement covering the resale of a number of shares of common stock equal to 100% of the shares issuable upon conversion of the preferred stock and exercise of the warrants as of the date of filing of the registration statement. The Registration Statement on Form SB-2 covering the resale of 23,400,000 shares of common stock was filed on May 25, 2007. Since that date, we have received and responded to comments on the registration statement from the Staff and amended the registration statement as necessary. Additionally, we have had discussions with the Staff in order to resolve the remaining comments. As of the date of this filing, certain comments are unresolved.

If the registration statement covering these shares is not declared effective by the Securities and Exchange Commission by August 30, 2007, we may become liable for liquidated damages equal to 1.5% per month (pro-rated on a daily basis for any period of less than a full month) of the aggregate purchase price of the preferred stock and warrants until the registration statement is declared effective.

Item 3. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2007. Disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, are controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our principal executive and financial officers, to allow timely decisions regarding required disclosures.

Based on the evaluation of our disclosure controls and procedures as of June 30, 2007, our Chief Executive Officer and our Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were operating effectively.

Change in Internal Control over Financial Reporting

The Company's management, in connection with its evaluation of internal controls (with the participation of the Company's principal executive officer and principal financial officer), did not identify any change in internal control over the financial reporting process that occurred during the Company's second fiscal quarter of 2007 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

None.

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

On May 2, 2007, pursuant to a securities purchase agreement with accredited investors dated April 12, 2007, as amended May 2, 2007, the Company sold 300 shares of a newly created series of preferred stock, designated "Series B Convertible Preferred Stock", with a stated value of $50,000 per share and issued warrants to purchase 7,500,000 shares of common stock for an aggregate purchase price of $15,000,000.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Submission of Matters to a Vote of Security Holders

None.

Item 5. Other Information

None.

Item 6. Exhibits

			Incorporated by Reference		
Exhibit No.	**Description**	**Filed with this Form 10-QSB**	**Form**	**Filing Date**	**Exhibit No.**
2.1	Agreement and plan of merger among Common Horizons, Inc., Nove Acquisition, Inc. and Novelos Therapeutics, Inc. dated May 26, 2005		8-K	June 2, 2005	99.2
2.2	Agreement and plan of merger between Common Horizons and Novelos Therapeutics, Inc. dated June 7, 2005		10-QSB	August 15, 2005	2.2
3.1	Amended and Restated Certificate of Incorporation filed as Exhibit A to the Certificate of Merger merging Nove Acquisition, Inc. with and into Novelos Therapeutics, Inc. dated May 26, 2005	X			
3.2	Certificate of Merger merging Common Horizons, Inc. with and into Novelos Therapeutics, Inc. dated June 13, 2005	X			
3.3	Certificate of Correction dated March 3, 2006	X			
3.4	Certificate of Amendment to Amended and Restated Certificate of Incorporation dated July 16, 2007	X			
3.5	Certificate of Designations of Series B convertible preferred stock	X			
3.6	Certificate of Designations of Series C cumulative convertible preferred stock	X			

Exhibit No.	Description	Filed with this Form 10-QSB	Incorporated by Reference		
			Form	Filing Date	Exhibit No.
3.7	By-Laws		8-K	June 17, 2005	2
4.1	Form of Common Stock Purchase Warrant dated May 2, 2007 issued pursuant to the Securities Purchase Agreement dated April 12, 2007		10-QSB	May 8, 2007	4.1
4.2	Form of Common Stock Purchase Warrant dated May 2, 2007 issued pursuant to the Agreement to Exchange and Consent dated May 2, 2007		10-QSB	May 8, 2007	4.2
10.1	Securities Purchase Agreement dated April 12, 2007		10-QSB	May 8, 2007	10.1
10.2	Letter Amendment dated May 2, 2007 to the Securities Purchase Agreement		10-QSB	May 8, 2007	10.2
10.3	Registration Rights Agreement dated May 2, 2007		10-QSB	May 8, 2007	10.3
10.4	Placement Agent Agreement with Rodman & Renshaw, LLC dated February 12, 2007		10-QSB	May 8, 2007	10.4
10.5	Agreement to Exchange and Consent dated May 1, 2007		10-QSB	May 8, 2007	10.5
31.1	Certification of the chief executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of the chief financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certificate pursuant to 18 U.S.C. Section 1350 of the chief executive officer	X			
32.2	Certificate pursuant to 18 U.S.C. Section 1350 of the chief financial officer	X			

SIGNATURES

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

NOVELOS THERAPEUTICS, INC.

Date: August 10, 2007

By: /s/ Harry S. Palmin

Harry S. Palmin

President, Chief Executive Officer

EXHIBIT INDEX

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AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

NOVELOS THERAPEUTICS, INC.

FIRST: The name of this Corporation is Novelos Therapeutics, Inc.

SECOND: The address, including street, number, city and county of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the city of Wilmington, County of Newcastle; and the name of the registered agent of the Corporation in the State of Delaware at such address is The Corporation Trust Company.

THIRD: The nature of the business and of the purposes to be conducted and promoted by the Corporation are to conduct any lawful business, to promote any lawful purpose, and to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The aggregate number of shares of stock that the Corporation shall have authority to issue is three thousand (3,000) shares of Common Stock, $.001 par value per share.

FIFTH: Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders, of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders, of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

SIXTH: The By-Laws of Nove Acquisition, Inc., which concurrently with the execution hereof is merging with and into the Corporation pursuant to Section 251 of the General Corporation Law of the State of Delaware, as in effect immediately before the execution hereof shall be the By-Laws of the Corporation upon such execution. Thereafter, the power to make, alter or repeal the By-Laws, and to adopt any new By-Law, shall be vested in the Board of Directors.

SEVENTH: To the fullest extent that the General Corporation Law of the State of Delaware, as it exists on the date hereof or as it may hereafter be amended, permits the limitation or elimination of the liability of directors, no director of this Corporation shall be personally liable to this Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. Notwithstanding the foregoing, a director shall be liable to the extent provided by applicable law: (1) for any breach of the director's duty of loyalty to the Corporation or its stockholders; (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (3) under Section 174 of the General Corporation Law of the State of Delaware; or (4) for any transaction from which the director derived any improper personal benefit. Neither the amendment or repeal of this Article, nor any adoption of any provision of this Certificate of Incorporation inconsistent with this Article, shall adversely affect any right or protection of a director of the Corporation existing at the time of such amendment or repeal.

EIGHTH: The Corporation shall, to the fullest extent permitted by Section 145 of the General Corporation Law of the State of Delaware, as the same may be amended and supplemented, indemnify any and all persons whom it shall have power to indemnify under said section from and against any and all of the expenses, liabilities or other matters referred to in or covered by said Section. The Corporation shall advance expenses to the fullest extent permitted by said Section. Such right to indemnification and advancement of expenses shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person. The indemnification and advancement of expenses provided for herein shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any By-Law, agreement, vote of stockholders or disinterested directors or otherwise.

CERTIFICATE OF MERGER
MERGING
COMMON HORIZONS, INC.
(a Nevada corporation)
WITH AND INTO
NOVELOS THERAPEUTICS, INC.
(a Delaware corporation)
under
Section 252 of the General Corporation Law
Of the State of Delaware

NOVELOS THERAPEUTICS, INC., a corporation organized and existing under the laws of the State of Delaware, DOES HEREBY CERTIFY that:

FIRST: The name and state of incorporation of each of the constituent corporations are NOVELOS THERAPEUTICS, INC., a Delaware corporation ("Novelos"), and COMMON HORIZONS, INC., a Nevada corporation ("CH").

SECOND: Each of Novelos and CH has approved, adopted, certified, executed and acknowledged an Agreement and Plan of Merger (the "Merger Agreement") dated as of June 3, 2005 in accordance with the provisions of subsection (c) of Section 252 of the General Corporation Law of the State of Delaware. The Merger Agreement was adopted by the requisite number of stockholders of each of Novelos and CH on June 7, 2005.

THIRD: The name of the surviving corporation is NOVELOS THERAPEUTICS, INC., which shall continue to be named NOVELOS THERAPEUTICS, INC.

FOURTH: Pursuant to the Merger Agreement, the Certificate of Incorporation of NOVELOS THERAPEUTICS, INC. shall be the Certificate of Incorporation of the surviving corporation, and the name of the corporation therein shall be changed to NOVELOS THERAPEUTICS, INC., provided, however, that Article FOURTH of said Certificate of Incorporation shall be amended to read in its entirety as follows:

"FOURTH: The aggregate number of shares of stock that the Corporation shall have authority to issue is one hundred million seven thousand (100,007,000) shares, of which one hundred million (100,000,000) shares shall be designated "Common Stock" and seven thousand (7,000) shares shall be designated "Preferred Stock". Shares of Common Stock and Preferred Stock shall have a par value of $.00001 per share.

Common Stock

Subject to the prior or equal rights, if any, of the Preferred Stock which hereafter may be authorized of any and all series stated and expressed by the Board of Directors in the resolution or resolutions providing for the issuance of such Preferred Stock, the holders of Common Stock shall be entitled (i) to receive dividends when and as declared by the Board of Directors out of any funds legally available therefore and (ii) in the event of dissolution, liquidation or winding up of the Corporation, to receive the remaining assets of the Corporation, ratably according to the number of shares of Common Stock held. The holders of Common Stock shall be entitled one vote for each share of Common Stock held on all matters submitted to a vote of stockholders of the Corporation. No holder of Common Stock shall have any preemptive right to purchase or subscribe for any part of any issue of stock of any class whatsoever, whether now or hereafter authorized.

Preferred Stock

Authority is hereby expressly granted to the Board of Directors from time to time to issue series of Preferred Stock and, in connection with the creation of each such series, to fix by the resolution or resolutions providing for the issue of shares thereof, the number of shares of such series, and the powers, designation, preferences and relative, participating, optional or other special rights, and the qualifications, limitations and restrictions of such series, to the full extent now or hereafter permitted by the laws of the State of Delaware."

FIFTH: The executed Merger Agreement is on file at the principal place of business of Novelos at One Gateway Center, Suite 504, Newton, Massachusetts 02458.

SIXTH: A copy of the Merger Agreement will be furnished by Novelos, on request and without cost, to any stockholder of any constituent corporation.

SEVENTH: Novelos hereby agrees that it will promptly pay to the dissenting shareholders of CH the amount, if any, to which they shall be entitled under the provisions of the Nevada Revised Statutes with respect to the rights of dissenting stockholders.

IN WITNESS WHEREOF, NOVELOS THERAPEUTICS, INC., a Delaware corporation, has caused this certification to be signed by Harry S. Palmin, its President, on this 13th day of June, 2005

NOVELOS THERAPEUTICS, INC.

By: /s/ Harry S. Palmin

Harry S. Palmin, President

STATE OF DELAWARE
CERTIFICATE OF CORRECTION

Novelos Therapeutics, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware

DOES HEREBY CERTIFY:

1. The name of the corporation is Novelos Therapeutics, Inc.

2. The Amended and Restated Certificate of Incorporation, attached as Exhibit A to the Certificate of Merger, filed with the Secretary of State of Delaware on May 26, 2005, is hereby corrected.

3. The inaccuracy to be correct in said Amended and Restated Certificate of Incorporation is as follows:

Article Fourth, the number of shares that the Corporation has authority to issue was incorrect.

4. The inaccuracy of said Article Fourth to the Amended and Restated Certificate of Incorporation is corrected as follows:

FOURTH. The total number of shares of stock that the Company is authorized to issue is 42,007,000 shares, consisting of 42,000,000 shares of Common Stock, $0.00001 par value per share (the "Common Stock"), and 7,000 shares of Preferred Stock, no par value per share (the "Preferred Stock"). Except as otherwise provided by law, the shares of the stock of the Company, regardless of class, may be issued by the Company from time to time in such amounts, for such consideration and for such corporate purposes as the Board of Directors may from time to time determine.

IN WITNESS WHEREOF, the undersigned has executed this Certificate on this 3rd day of March, 2006

/s/ Harry S. Palmin
Harry S. Palmin, President

CERTIFICATE OF AMENDMENT
TO
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION

OF

NOVELOS THERAPEUTICS, INC.

Pursuant to Section 242
of the General Corporation Law
of the State of Delaware

Novelos Therapeutics, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify as follows:

1.A resolution was duly adopted by written consent of the Board of Directors of the Corporation, pursuant to Section 242 of the General Corporation Law of the State of Delaware, setting forth an amendment to the Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment at a meeting duly held on July 16, 2007 at which a quorum was present and acting throughout and in accordance with the provisions of Section 242 of the Delaware General Corporation Law, and written notice of such action has been provided to those stockholders who did not consent in writing to such action. The resolution setting forth the amendment is as follows:

RESOLVED, that the Amended and Restated Certificate of Incorporation of the Corporation be amended by deleting Article FOURTH thereof in its entirety and substituting therefor the following new article FOURTH:

> **FOURTH:** The aggregate number of shares of stock that the Corporation shall have authority to issue is one hundred fifty million seven thousand (150,007,000) shares, of which one hundred fifty million (150,000,000) shares shall be designated "Common Stock" and seven thousand (7,000) shares shall be designated "Preferred Stock." Shares of Common Stock and Preferred Stock shall have a par value of $.00001 per share.

2.That the foregoing amendment was approved by the holders of the requisite number of shares of the Corporation in accordance with Section 242 of the General Corporation Law.

3.That this Certificate of Amendment, which amends the provisions of the Corporation's Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Section 242 of the General Corporation Law.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by, Harry S. Palmin, its President, this 16th day of July, 2007.

NOVELOS THERAPEUTICS, INC.

By: /s/ Harry S. Palmin

Name: Harry S. Palmin
Title: President

CERTIFICATE OF DESIGNATIONS, PREFERENCES AND RIGHTS

OF

SERIES B CONVERTIBLE PREFERRED STOCK

OF

NOVELOS THERAPEUTICS, INC.

(Pursuant to Section 151 of the
Delaware General Corporation Law)

Novelos Therapeutics, Inc. (the "*Corporation*"), a corporation organized and existing under the laws of the State of Delaware, hereby certifies that, pursuant to authority conferred on its Board of Directors (the "*Board*") by the Certificate of Incorporation of the Corporation, the following resolution was adopted by the Board at a meeting of the Board duly held on May 2, 2007, which resolution remains in full force and effect on the date hereof:

RESOLVED, that there is hereby established a series of the Corporation's authorized Preferred Stock (the "*Preferred Stock*") having a par value of $0.00001 per share, which series shall be designated as "Series B Convertible Preferred Stock" (the "*Series B Preferred Stock*") and shall consist of Four Hundred (400) shares. The shares of Series B Preferred Stock shall have the voting powers, designations, preferences and other special rights, and qualifications, limitations and restrictions thereof set forth below:

1. *Certain Definitions*. As used herein, the following terms shall have the following meanings:

(a) "*Affiliate*" shall mean, with respect to any Person, any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, "*control*," when used with respect to any Person, means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "*affiliated*," "*controlling*" and "*controlled*" have meanings correlative to the foregoing.

(b) "*Business Day*" shall mean a day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

(c) "*Fair Market Value*" shall mean, with respect to any listed security, its Market Price, and with respect to any property or assets other than cash or listed securities, the fair value thereof determined in good faith by the Board and the Requisite Holders.

(d) "*Initial Issue Date*" shall mean the date that shares of Series B Preferred Stock are first issued by the Corporation.

(e) "*Lead Series B Preferred Investors*" shall mean each of Xmark Opportunity Fund, L.P., a Delaware limited partnership ("*Xmark LP*"), Xmark Opportunity Fund, Ltd., a Cayman Islands exempted company ("*Xmark Ltd*"), Xmark JV Investment Partners LLC, a Delaware limited liability company ("*Xmark LLC*"), Caduceus Master Fund Limited, a Bermuda corporation ("*Caduceus Master*"), Caduceus Capital II, L.P., a Delaware limited partnership ("*Caduceus Capital*"), UBS Eucalyptus Fund, L.L.C., a Delaware registered investment company ("*UBS Eucalyptus*"), PW Eucalyptus Fund, Ltd., a Cayman Islands investment company ("*PW Eucalyptus*") and HFR SHC Aggressive Master Trust, a Bermuda trust ("*HFR*").

(f) "*Market Price*", as of a particular date (the "*Valuation Date*"), shall mean the following with respect to any class of listed securities: (A) if such security is then listed on a national stock exchange, the Market Price shall be the closing sale price of one share of such security on such exchange on the last trading day prior to the Valuation Date, provided that if such security has not traded in the prior ten (10) trading sessions, the Market Price shall be the average closing price of such security in the most recent ten (10) trading sessions during which such security has traded; (B) if such security is then included in the OTC Bulletin Board, the Market Price shall be the closing sale price of one share of such security on the OTC Bulletin Board on the last trading day prior to the Valuation Date or, if no such closing sale price is available, the average of the high bid and the low ask price quoted on the OTC Bulletin Board as of the end of the last trading day prior to the Valuation Date, provided that if such stock has not traded in the prior ten (10) trading sessions, the Market Price shall be the average closing price of one share of such security in the most recent ten (10) trading sessions during which such security has traded; or (C) if such security is then included in the "pink sheets," the Market Price shall be the closing sale price of one share of such security on the "pink sheets" on the last trading day prior to the Valuation Date or, if no such closing sale price is available, the average of the high bid and the low ask price quoted on the "pink sheets" as of the end of the last trading day prior to the Valuation Date, provided that if such stock has not traded in the prior ten (10) trading sessions, the Market Price shall be the average closing price of one share of such security in the most recent ten (10) trading sessions during which such security has traded.

(g) "*OrbiMed Entities*" shall mean, collectively, Caduceus Master, Caduceus Capital, UBS Eucalyptus, PW Eucalyptus and HFR.

(h) "*Person*" shall mean any individual, partnership, company, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, government or agency or political subdivision thereof, or other entity.

(i) "*Principal Market*" means the Trading Market on which the Common Stock is primarily listed on and quoted for trading, which, as of the Initial Issue Date means the OTC Bulletin Board ("*OTCBB*").

(j) "*Requisite Holders*" shall mean the holders of at least a majority of the then outstanding shares of Preferred Stock which majority must include (i) the Xmark Entities, provided such Xmark Entities have purchased an aggregate of $4,000,000 of Preferred Stock and hold at least one-third of the Preferred Stock issued to the Xmark Entities and (ii) the OrbiMed Entities, provided such OrbiMed Entities have purchased an aggregate of $5,000,000 of Preferred Stock and hold at least one-third of the Preferred Stock issued to the OrbiMed Entities (appropriately adjusted for any stock dividend, stock split, reverse stock split, reclassification, stock combination or other recapitalization occurring after the date hereof).

(k) "*SEC*" shall mean the U.S. Securities and Exchange Commission.

(l) "*Series B Stated Value*" shall mean, with respect to each share of Series B Preferred Stock, Fifty Thousand Dollars ($50,000), which Series B Stated Value shall be subject to appropriate adjustment from time to time in the event of any stock dividend, stock split, reverse stock split, reclassification, stock combination or other recapitalization affecting the Series B Preferred Stock.

(m) "*Trading Day*" means any day on which the Common Stock is purchased and sold on the Principal Market.

(n) "*VWAP*" on a Trading Day means the volume weighted average price of the Common Stock for such Trading Day on the Principal Market as reported by Bloomberg Financial Markets or, if Bloomberg Financial Markets is not then reporting such prices, by a comparable reporting service of national reputation selected by the Requisite Holders and reasonably satisfactory to the Corporation. If VWAP cannot be calculated for the Common Stock on such Trading Day on any of the foregoing bases, then the Corporation shall submit such calculation to an independent investment banking firm of national reputation reasonably acceptable to the Requisite Holders, and shall cause such investment banking firm to perform such determination and notify the Corporation and the Requisite Holders of the results of determination no later than two (2) Business Days from the time such calculation was submitted to it by the Corporation. All such determinations shall be appropriately adjusted for any stock dividend, stock split or other similar transaction during such period.

(o) "*Xmark Entities*" shall mean, collectively, Xmark LP, Xmark Ltd and Xmark LLC.

2. *Designation; Preference and Ranking*. The Series B Preferred Stock shall consist of Four Hundred (400) shares. The preferences of each share of Series B Preferred Stock with respect to dividend payments and distributions of the Corporation's assets upon voluntary or involuntary liquidation, dissolution or winding up of the Corporation shall be equal to the preferences of every other share of Series B Preferred Stock from time to time outstanding in every respect. Notwithstanding the terms and conditions of any series of Preferred Stock now or hereafter existing providing that the Series B Preferred Stock shall rank junior or senior thereto, the Series B Preferred Stock shall rank senior to all other outstanding series of Preferred Stock and senior to the Common Stock, par value $0.00001 per share (the "*Common Stock*"), of the Corporation as to the payment of dividends and the distribution of assets upon voluntary or involuntary liquidation, dissolution or winding up of the Corporation. No other equity or equity-linked securities shall be permitted to rank pari passu with the Series B Preferred Stock without express written approval of the Lead Series B Preferred Investors.

3. *Dividend Rights*. (a) Each holder of Series B Preferred Stock, in preference and priority to the holders of all other classes of stock, shall be entitled to receive, with respect to each share of Series B Preferred Stock then outstanding and held by such holder of Series B Preferred Stock, dividends, commencing from the date of issuance of such share of Series B Preferred Stock, at the rate of nine percent (9%) per annum of the Series B Stated Value (the "*Series B Preferred Dividends*"). The Series B Preferred Dividends shall be cumulative, whether or not earned or declared, and shall be paid semi-annually in arrears beginning on September 30, 2007 and then on the last day of March and September in each year. The Series B Preferred Dividends shall be paid to each holder of Series B Preferred Stock in cash, out of legally available funds or at the Corporation's election, but only if the Common Stock underlying such dividends are on the payment date subject to an effective Registration Statement (as defined in the Registration Rights Agreement), in Common Stock, based on the lesser of (x) the Conversion Price (as defined below) then in effect, and (y) the Fair Market Value of the Common Stock on the Business Day preceding the payment date. If shares of Series B Preferred Stock are transferred in between the scheduled Series B Preferred Stock dividend payment dates, each of the transferor and transferee of the Series B Preferred Stock are entitled to their respective pro rata portion of such Series B Preferred Dividends as of the date of transfer. Any election by the Corporation to pay dividends in cash or shares of Common Stock shall be made uniformly with respect to all outstanding shares of Series B Preferred Stock for a given dividend period.

(b) No dividends shall be paid on any Common Stock of the Corporation or any other capital stock of the Corporation during any fiscal year of the Corporation until all Series B Preferred Dividends (with respect to the current fiscal year and all prior fiscal years) shall have been paid, or declared and set apart for payment, when due to the holders of Series B Preferred Stock.

(c) In the event that the Corporation shall at any time pay a dividend on the Common Stock (other than a dividend payable solely in shares of Common Stock) or any other class or series of capital stock of the Corporation (except for Series C Preferred Stock), the Corporation shall, at the same time, pay to each holder of Series B Preferred Stock a dividend equal to the dividend that would have been payable to such holder if the shares of Series B Preferred Stock held by such holder had been converted into Common Stock on the date of determination of holders of Common Stock entitled to receive such dividends, subject to the limitations on conversion set forth in Sections 6(l) below.

4. ***Liquidation Rights***. (a) In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the holders of Series B Preferred Stock shall be entitled to receive, on a pro rata basis, prior and in preference to any distribution of any of the assets or surplus funds of the Corporation to the holders of the Common Stock, or any other class of capital stock of the Corporation, an amount equal to the Series B Stated Value for each share of Series B Preferred Stock then held by such holder, plus an amount equal to all declared but unpaid dividends, and all accrued but unpaid dividends set forth in Section 3(a) above, on each such share of Series B Preferred Stock (the "*Liquidation Preference Payment*"). If, upon the occurrence of any such liquidation, dissolution or winding up of the Corporation, the assets and funds to be distributed among the holders of Series B Preferred Stock shall be insufficient to permit the payment to such holders of the full Liquidation Preference Payment, then the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of Series B Preferred Stock in proportion to the Liquidation Preference Payment each such holder is entitled to receive, and no assets of the Corporation shall be distributed to the holders of the Common Stock or any other class or series of capital stock of the Corporation in respect of such Common Stock or such other stock unless and until the Liquidation Preference Payment payable to all holders of the Series B Preferred Stock has been paid in full.

(b) After payment of the full Liquidation Preference Payment to the holders of the Series B Preferred Stock as set forth in Section 4(a) above and subject to any other distribution that may be required with respect to any future series of Preferred Stock that may from time to time come into existence, the remaining assets and funds of the Corporation, if any, available for distribution to stockholders shall be distributed (i) in connection with a Liquidation Event pursuant to Section 4(c)(1) below, ratably among the holders of the Series B Preferred Stock, any other class or series of capital stock that participates with the Common Stock in the distribution of assets upon such Liquidation Event and the Common Stock, with the holders of the Series B Preferred Stock deemed to hold that number of shares of Common Stock into which such shares of Series B Preferred Stock are then convertible and (ii) in connection with a Liquidation Event pursuant to Sections 4(c)(2)-(5) below, ratably among the holders of Common Stock.

(c) The Requisite Holders, by written notice to the Corporation at least two (2) Business Days prior to the effective date thereof, may elect to treat any of the following transactions as a dissolution or winding up of the Corporation (each a "*Liquidation Event*") for the purposes of this Section 4: (1) any dissolution, winding up or liquidation of the Corporation; (2) any sale, lease or other transfer of substantially all of the Corporation's assets, in one or a series of transactions; (3) any merger, consolidation or similar business combination transaction, in which the Corporation is not the survivor or, if the Corporation is the survivor, then only if the holders of a majority of the Common Stock outstanding immediately before such transaction cease to own a majority of the Common Stock immediately after the transaction; (4) in one or a series of events, any change in the majority of the members of the Corporation's Board of Directors (the "*Board*"), unless the replacement directors were nominated by the majority of the Board immediately preceding such change; and (5) if any person or entity (other than the Investors) shall acquire or become the "beneficial owner" (as that term is defined in Rule 13d-3 of the Exchange Act) of more than 50% of the Corporation's outstanding stock.

(d) Distributions Other than Cash. Whenever the distributions provided for in this Section 4 shall be payable in property other than cash, the value of such distribution shall be the Fair Market Value thereof. All distributions (including distributions other than cash) made hereunder shall be made pro rata to the holders of Series B Preferred Stock, based on the number of shares of Series B Preferred Stock held by each such holder.

(e) Right to Convert. Nothing in this Section 4 shall affect in any way the right of each holder of Series B Preferred Stock to convert such shares at any time and from time to time into Common Stock in accordance with Section 6 hereof prior to the Liquidation Event.

5. ***Voting Rights; Protective Provisions; Covenants***.

(a) Except as otherwise provided herein or as required by applicable law, the holders of Series B Preferred Stock shall be entitled to vote on all matters on which the holders of Common Stock shall be entitled to vote, in the same manner and with the same effect as the holders of Common Stock, voting together with the holders of Common Stock as a single class. For this purpose, the holders of Series B Preferred Stock shall be given notice of any meeting of stockholders as to which the holders of Common Stock are given notice in accordance with the by-laws of the Corporation. As to any matter on which the holders of Series B Preferred Stock shall be entitled to vote, each holder of Series B Preferred Stock shall have a number of votes per share of Series B Preferred Stock held of record by such holder on the record date for the meeting of stockholders, if such matter is subject to a vote at a meeting of stockholders, or on the effective date of any written consent, if such matter is subject to a written consent of the stockholders without a meeting of stockholders, equal to the number of shares of Common Stock into which such share of Series B Preferred Stock is then convertible on such record date or effective date, as the case may be, in accordance with Section 6 hereof (subject to the limitations on conversion set forth in Sections 6(l) below).

(b) So long as all or any portion of the Series B Preferred Stock remain outstanding, without the prior written consent of the holders of the Requisite Holders, the Corporation shall not, directly or indirectly, take any of the following actions or agree to take any of the following actions:

(1) amend, alter or repeal (whether by merger, consolidation or otherwise) any provision of the Corporation's certificate of incorporation (except for such amendments to increase the number of authorized common stock of the Corporation to 150,000,000 shares) or the bylaws;

(2) create or authorize the creation of or issue any equity security, or any security convertible into or exercisable for any equity security, unless the per share price of such securities exceeds $1.00 in cash and such securities rank junior to the Series B Preferred Stock; provided that the Company may issue shares of Common Stock or options to employees, consultants, officers or directors of the Company pursuant to any stock or option plan duly adopted by a majority of the non-employee members of the Board of Directors of the Company or a majority of the members of a committee of non-employee directors established for such purpose;

(3) increase the number of authorized shares of Series B Preferred Stock or authorize the issuance of or issue any shares of Series B Preferred Stock (other than in connection with the payment of Series B Preferred Dividends in accordance with Section 3 hereof);

(4) sell, lease, convey, license or otherwise grant any rights with respect to, all or substantially all of its assets (and in the case of licensing, any material intellectual property) or business of the Corporation and shall not effect any merger or consolidation with any other company unless as a result thereof and after giving effect thereto (a) the Corporation shall be the surviving corporation, (b) the Series B Preferred Stock shall continue to be outstanding, (c) there shall be no change in the preference, privileges or other rights and restrictions with respect to the Series B Preferred Stock and (d) there shall not be created or thereafter exist as a result of thereof any new class of shares having preference over the Series B Preferred Stock with respect to dividends, distribution of assets or rights upon liquidation;

(5) except for a declaration or payment of dividends on the Series B Preferred Stock and the Series C Preferred Stock (at such time as all accrued and unpaid dividends on shares of Series B Preferred Stock then due have been paid), the Corporation shall not declare or pay any dividends on any common stock, preferred stock or other capital stock of the Corporation;

(6) except for a redemption or repurchase of the Series B Preferred Stock or the Warrants issued to the holders of Series B Preferred Stock on the Initial Issue Date, the Corporation shall not redeem or repurchase any of its capital stock (or security exercisable, convertible or exchangeable for any of its capital stock), except relating to settlement with departing employees pursuant to written employment agreements in effect on the Initial Issue Date;

(7) incur any debt for borrowed money except with respect to borrowings pursuant to letter(s) of credit in effect as of the date hereof in an amount not to exceed $1,500,000 in the aggregate; provided that any such letter(s) of credit is/are fully cash collateralized; and

(8) change the number of directors which constitutes the Board of Directors.

6. *Conversion*. The holders of shares of Series B Preferred Stock shall have the following conversion rights:

(a) Optional Conversion. Subject to the terms and conditions of this Section 6, the holder of any share or shares of Series B Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series B Preferred Stock into such number of fully paid and nonassessable shares of Common Stock as is obtained by: (i) multiplying the number of shares of Series B Preferred Stock to be converted by the Series B Stated Value and adding to such product the amount of any accrued but unpaid dividends with respect to such shares of Series B Preferred Stock to be converted; and (ii) dividing the result obtained pursuant to clause (i) above by the Series B Conversion Price then in effect.

(b) Mandatory Conversion. Subject to the terms and conditions of this Section 6, if the Registration Statement covering the resale of the shares of Common Stock underlying all of the Series B Preferred Stock is declared effective by the SEC, and is then effective, and the daily VWAP of the Common Stock for twenty (20) consecutive trading days exceeds $2.00 per share, then the outstanding Series B Preferred Stock shall automatically convert, together with accrued dividends, into Common Stock at the Conversion Price then in effect.

(c) The "*Series B Conversion Price*" shall initially be $1.00, and shall be subject to adjustment from time to time in accordance with the provisions of this Section 6.

(d) Conversion Procedures:

(1) Optional. The rights of conversion set forth in this Section 6 shall be exercised by any holder of Series B Preferred Stock by giving written notice to the Corporation that such holder elects to convert a stated number of shares of Series B Preferred Stock into Common Stock (the "*Optional Conversion Notice*") and by surrender of a certificate or certificates for the shares of Series B Preferred Stock so to be converted (or, in lieu thereof, by delivery of an appropriate lost stock affidavit in the event such certificate or certificates have been lost or destroyed) to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the holders of Series B Preferred Stock) at any time on the date set forth in such notice (which date shall not be earlier than the Corporation's receipt of such notice), together with a statement of the name or names (with address) in which the certificate or certificates for shares of Common Stock shall be issued.

(2) Mandatory. In the case of mandatory conversion, the Corporation shall within five (5) Business Days of the occurrence of the events described in Section 6(b) notify the Corporation's transfer agent of such events ("*Mandatory Conversion Notice*") which shall identify the Conversion Price then in effect and direct the Transfer Agent to send certificates representing shares of Common Stock issued upon conversion to the holders of Series B Preferred Stock upon surrender of the certificates for shares of Series B Preferred Stock; and the Corporation shall provide a copy of such Mandatory Conversion Notice to each holder of Series B Preferred Stock. The Mandatory Conversion Notice shall state the Conversion Price then in effect and the address for the Company's transfer agent to send the new Common Stock upon surrender of the Series B Preferred Stock certificates to the Company's transfer agent and the address of the Company's transfer agent for the holder to send its Series B Preferred Stock certificate(s). Immediately upon the occurrence of the events described in Section 6(b), all shares of Series B Preferred Stock shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate, except only the right of the holders thereof, upon surrender of their certificate or certificates therefor, to receive certificates representing the number of shares of Common Stock into which such Series B Preferred Stock has been converted.

(e) Promptly after receipt of the written notices referred to in Section 6(d) above and surrender of the certificate or certificates for the share or shares of Series B Preferred Stock to be converted (or, in lieu thereof, by delivery of an appropriate lost stock affidavit in the event such certificate or certificates have been lost or destroyed), but in no event more than three (3) Business Days thereafter, the Corporation shall issue and deliver, or cause to be issued and delivered, to the holder of Series B Preferred Stock, registered in such name or names as such holder may direct in writing, a certificate or certificates for the number of whole shares of Common Stock issuable upon the conversion of such share or shares of Series B Preferred Stock. To the extent permitted by law, such optional conversion shall be deemed to have been effected, and the Series B Conversion Price shall be determined, as of the close of business on the date on which such Optional Conversion Notice shall have been received by the Corporation and the certificate or certificates for such share or shares of Series B Preferred Stock shall have been surrendered as aforesaid (or, in lieu thereof, an appropriate lost stock affidavit has been delivered to the Corporation). Upon a mandatory conversion, such conversion shall be deemed to have been effected, and the Series B Conversion Price shall be determined, as of the close of business on the date on which the conditions in Section 6(b) have been satisfied. At such time of conversions, the rights of the holder of such share or shares of Series B Preferred Stock shall cease with respect to the shares of Series B Preferred Stock being converted, and the Person or Persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares represented thereby.

(f) If the Company shall fail for any reason or for no reason to issue to a holder the applicable certificate or certificates within three (3) Business Days of receipt of documents necessary for the conversions set forth above (the "*Deadline Date*"), then, in addition to all other remedies available to such holder, if on or after the Business Day immediately following such three (3) Business Day period, such holder or holder's broker, acting on behalf of such holder, purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the holder of shares of Common Stock that such holder anticipated receiving from the Company upon a conversion of holder's Series B Preferred tock (a "*Buy-In*"), then the Company shall, within three (3) Business Days after such holder's request and in such holder's sole discretion, either (i) pay cash to the holder in an amount equal to such holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "*Buy-In Price*"), at which point the Company's obligation to deliver such certificate (and to issue such shares of Common Stock) shall terminate, or (ii) promptly honor its obligation to deliver to such holder a certificate or certificates representing such shares of Common Stock and pay cash to the holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (a) such number of shares of Common Stock, times (b) the closing bid price on the Deadline Date.

(g) No fractional shares shall be issued upon any conversion of shares of Series B Preferred Stock into Common Stock. If any fractional share of Common Stock would, except for the provisions of the first sentence of this Section 6(g), be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the shares of Series B Preferred Stock for conversion an amount in cash equal to the Market Price of such fractional share of Common Stock. In case the number of shares of Series B Preferred Stock represented by the certificate or certificates surrendered pursuant to Section 6(d) above exceeds the number of shares converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Series B Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

(h) If, at any time after the Initial Issue Date, the number of shares of Common Stock outstanding is increased by a stock dividend payable in shares of Common Stock or by a subdivision or split-up of shares of Common Stock, then, following the record date for the determination of holders of Common Stock entitled to receive such stock dividend, or to be affected by such subdivision or split-up, the Series B Conversion Price shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion of Series B Preferred Stock shall be increased in proportion to such increase in outstanding shares.

(i) If, at any time after the Initial Issue Date, the number of shares of Common Stock outstanding is decreased by a combination of the outstanding shares of Common Stock into a smaller number of shares of Common Stock, then, following the record date to determine shares affected by such combination, the Series B Conversion Price shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of Series B Preferred Stock shall be decreased in proportion to such decrease in outstanding shares.

(j) If the Common Stock issuable upon the conversion of the Series B Preferred Stock shall be changed into the same or different number of shares of any class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination or shares of stock dividend provided for elsewhere in this Section 6, or the sale of all or substantially all of the Corporation's properties and assets to any other Person), then and in each such event the holder of each share of Series B Preferred Stock shall have the right thereafter to convert such share into the kind and amount of shares of stock and other securities and property receivable upon such reorganization, reclassification or other change by holders of the number of shares of Common Stock into which such shares of Series B Preferred Stock might have been converted, as the case may be, immediately prior to such reorganization, reclassification or change, all subject to further adjustment as provided herein.

(k) If at any time or from time to time there shall be a merger or consolidation of the Corporation with or into another corporation, or the sale of all or substantially all of the Corporation's properties and assets to any other Person, then, as a part of such merger, or consolidation or sale, provision shall be made so that holders of Series B Preferred Stock, as the case may be, shall thereafter be entitled to receive upon conversion of the Series B Preferred Stock, the number of shares of stock or other securities or property of the Corporation, or of the successor corporation resulting from such merger, consolidation or sale, to which such holder would have been entitled if such holder had converted its shares of Series B Preferred Stock immediately prior to such merger, consolidation or sale, without regard to any conversion limitation specified in Section 6(j). In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 6 with respect to the rights of the holders of the Series B Preferred Stock after the merger, consolidation or sale to the end that the provisions of this Section 6, including adjustment of the Series B Conversion Price then in effect for the Series B Preferred Stock and the number of shares issuable upon conversion of the Series B Preferred Stock) shall be applicable after that event in as nearly equivalent a manner as may be practicable.

(l) (I) Except as to a mandatory conversion contemplated by Section 6(b) above, notwithstanding anything herein to the contrary, in no event shall a holder of Series B Preferred Stock be entitled to convert any portion of the Series B Preferred Stock so held by such holder in excess of that portion upon conversion of which the sum of (1) the number of shares of Common Stock beneficially owned by such holder and its Affiliates (other than shares of Common Stock which may be deemed beneficially owned through ownership of the unconverted shares of Series B Preferred Stock or the unexercised or unconverted portion of any other security of the holder subject to a limitation on conversion analogous to the limitations contained herein) and (2) the number of shares of Common Stock issuable upon the conversion of that portion of the Series B Preferred Stock with respect to which the determination of this proviso is being made, would result in beneficial ownership by such holder and its Affiliates of any amount greater than 4.99% of the then outstanding shares of Common Stock (whether or not, at the time of such conversion, the Holder and its Affiliates beneficially own more than 4.99% of the then outstanding shares of Common Stock). The waiver by a holder of Series B Preferred Stock of any limitation contained in an option or convertible security now or hereafter held by such holder that is similar or analogous to the limitations set forth in this Section 6(l) shall not be deemed a waiver or otherwise effect the limitation set forth in this Section 6(l), unless such waiver expressly states it is a waiver of the provisions of this Section 6(l). For purposes of this Section 6(l), beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and Regulations 13D-G thereunder, except as otherwise provided in clause (1) of such proviso. Any holder of Series B Preferred Stock may waive the limitations set forth herein by sixty-one (61) days written notice to the Corporation.

(II) Except as to a mandatory conversion contemplated by Section 6(b) above, notwithstanding anything herein to the contrary, in no event shall a holder of Series B Preferred Stock be entitled to convert any portion of the Series B Preferred Stock so held by such holder in excess of that portion upon conversion of which the sum of (1) the number of shares of Common Stock beneficially owned by such holder and its Affiliates (other than shares of Common Stock which may be deemed beneficially owned through ownership of the unconverted shares of Series B Preferred Stock or the unexercised or unconverted portion of any other security of the holder subject to a limitation on conversion analogous to the limitations contained herein) and (2) the number of shares of Common Stock issuable upon the conversion of that portion of the Series B Preferred Stock with respect to which the determination of this proviso is being made, would result in beneficial ownership by such holder and its Affiliates of any amount greater than 9.99% of the then outstanding shares of Common Stock (whether or not, at the time of such conversion, the Holder and its Affiliates beneficially own more than 9.99% of the then outstanding shares of Common Stock). The waiver by a holder of Series B Preferred Stock of any limitation contained in an option or convertible security now or hereafter held by such holder that is similar or analogous to the limitations set forth in this Section 6(l) shall not be deemed a waiver or otherwise effect the limitation set forth in this Section 6(l), unless such waiver expressly states it is a waiver of the provisions of this Section 6(l). For purposes of this Section 6(l), beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and Regulations 13D-G thereunder, except as otherwise provided in clause (1) of such proviso. Any holder of Series B Preferred Stock may waive the limitations set forth herein by sixty-one (61) days written notice to the Corporation.

(m) Notices of Record Date. In case at any time:

(1) the Corporation shall declare any dividend upon its Common Stock or any other class or series of capital stock of the Corporation payable in cash or stock or make any other distribution to the holders of its Common Stock or any such other class or series of capital stock;

(2) the Corporation shall offer for subscription pro rata to the holders of its Common Stock or any other class or series of capital stock of the Corporation any additional shares of stock of any class or other rights; or

(3) there shall be any capital reorganization or reclassification of the capital stock of the Corporation, any Acquisition or a liquidation, dissolution or winding up of the Corporation;

then, in any one or more of said cases, the Corporation shall give, by delivery in person or by certified or registered mail, return receipt requested, addressed to each holder of any shares of Series B Preferred Stock at the address of such holder as shown on the books of the Corporation, (a) at least 20 Business Days' prior written notice of the date on which the books of the Corporation shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any event set forth in clause (3) of this Section 6(m) and (b) in the case of any event set forth in clause (3) of this Section 6(m), at least 20 Business Days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause (a) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock or such other class or series of capital stock shall be entitled thereto and such notice in accordance with the foregoing clause (b) shall also specify the date on which the holders of Common Stock and such other series or class of capital stock shall be entitled to exchange their Common Stock and other stock for securities or other property deliverable upon consummation of the applicable event set forth in clause (3) of this Section 6(m).

(n) Upon any adjustment of the Series B Conversion Price, then and in each such case the Corporation shall give prompt written notice thereof, by delivery in person or by certified or registered mail, return receipt requested, addressed to each holder of shares of Series B Preferred Stock at the address of such holder as shown on the books of the Corporation, which notice shall state the Series B Conversion Price resulting from such adjustment and setting forth in reasonable detail the method upon which such calculation is based.

(o) The Corporation will at all times reserve and keep available out of its authorized Common Stock, solely for the purpose of issuance upon conversion of the Series B Preferred Stock as herein provided, 125% (which percentage shall be decreased to 100% in the event the Company's shareholders do no approve an amendment to the Company's certificate of incorporation to increase the number of authorized shares of Common Stock to 150,000,000) of such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Series B Preferred Stock without regard to the limitation set forth in Section 6(l). The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued and fully paid and nonassessable, and free from all taxes, liens and charges with respect to the issue thereof, and, without limiting the generality of the foregoing, the Corporation covenants that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the Series B Conversion Price in effect at the time. The Corporation will take all such action as may be necessary to assure that all such shares of Common Stock may be so issued without violation of any applicable law or regulation, or of any requirement of any national securities exchange upon which the Common Stock may be listed. The Corporation will not take any action which results in any adjustment of the Series B Conversion Price if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Series B Preferred Stock would exceed the total number of shares of Common Stock then authorized by the Corporation's Amended and Restated Certificate of Incorporation.

(p) The issuance of certificates for shares of Common Stock upon conversion of Series B Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Series B Preferred Stock which is being converted.

(q) The Corporation will at no time close its transfer books against the transfer of any Series B Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Series B Preferred Stock in any manner which interferes with the timely conversion of such Series B Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

7. ***Amendment***. This Certificate of Designations may only be amended with the prior written consent of the Requisite Holders and, in the event that any such amendment materially adversely affects a holder of Series B Preferred Stock in a manner disproportionate to the other holders of Series B Preferred Stock, without the prior written consent of such holder. The Corporation may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Corporation shall have obtained the written consent to such action or omission to act, of the Requisite Holders and, in the event that any such action or omission to act materially adversely affects a holder of Series B Preferred Stock in a manner disproportionate to the other holders of Series B Preferred Stock, without the prior written consent of such holder.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Designations to be duly executed as of the 2nd day of May, 2007.

NOVELOS THERAPEUTICS, INC.

/s/ Harry S. Palmin

Name: Harry S. Palmin
Title: President and CEO

CERTIFICATE TO SET FORTH DESIGNATIONS, VOTING POWERS, PREFERENCES, LIMITATIONS, RESTRICTIONS, AND RELATIVE RIGHTS OF SERIES C 8% CUMULATIVE CONVERTIBLE PREFERRED STOCK, $.00001 PAR VALUE PER SHARE

It is hereby certified that:

I. The name of the corporation is Novelos Therapeutics, Inc. (the "Corporation"), a Delaware corporation.

II. Set forth hereinafter is a statement of the voting powers, preferences, limitations, restrictions, and relative rights of shares of Series C 8% Cumulative Convertible Preferred Stock hereinafter designated as contained in a resolution of the Board of Directors of the Corporation pursuant to a provision of the Certificate of Incorporation of the Corporation permitting the issuance of said Series C 8% Cumulative Convertible Preferred Stock by resolution of the Board of Directors:

Series C 8% Cumulative Convertible Preferred Stock, $.00001 par value.

III. So long as any of the 400 shares of Series B Convertible Preferred Stock designated in the Series B certificate of designations (the "Series B Preferred Stock") are outstanding, the Series B Preferred Stock shall rank senior to any and all other preferred stock or equity securities of the Corporation, including, without limitation, the Series C Preferred Stock. Notwithstanding anything herein to the contrary, without the prior written consent of the Requisite Holders (as such term is defined in the certificate of designations for the Series B Preferred Stock (the "Series B Designations")) of the Series B Preferred Stock, or except as expressly permitted in the Series B Designations, no payments shall be made to the holders of the Series C Preferred Stock in respect of such Series C Preferred Stock so long as any shares of Series B Preferred Stock are outstanding.

1. Designation: Number of Shares. The designation of said series of Preferred Stock shall be Series C 8% Cumulative Convertible Preferred Stock (the "Series C Preferred Stock"). The number of shares of Series C Preferred Stock shall be 272. Each share of Series C Preferred Stock shall have a stated value equal to $12,000 (as adjusted for any stock dividends, combinations or splits with respect to such shares) (the "Stated Value"), and $.00001 par value. The Corporation may issue fractions of a share of Series C Preferred Stock.

2. Dividends.

(a) After all outstanding dividends on the Series B Preferred Stock (with respect to the current fiscal year and all prior fiscal years) shall have been paid to the holders of the Series B Preferred Stock, the holders of outstanding shares of Series C Preferred Stock shall be entitled to receive dividends in cash out of any funds of the Corporation before any dividend or other distribution will be paid or declared and set apart for payment on any shares of any Common Stock, or other class of stock presently authorized or to be authorized other than the Series B Preferred Stock (the Common Stock, and such other stock (other than the Series B Preferred Stock) being hereinafter collectively the "Junior Stock") at the rate of 8% per annum on the Stated Value, until October 1, 2008 and thereafter at the rate of 20% per annum on the Stated Value, payable commencing with the period ending June 30, 2007 and quarterly thereafter. To the extent not prohibited by law or this Section 2(a), dividends must be paid to the Holders not later than five (5) business days after the end of each period for which dividends are payable.

(b) The dividends on the Series C Preferred Stock at the rates provided above shall be cumulative whether or not declared so that, if at any time full cumulative dividends at the rate aforesaid on all shares of the Series C Preferred Stock then outstanding from the date from and after which dividends thereon are cumulative to the end of the quarterly dividend period next preceding such time shall not have been paid or declared and set apart for payment, or if the full dividend on all such outstanding Series C Preferred Stock for the then current dividend period shall not have been paid or declared and set apart for payment, the amount of the deficiency shall be paid or declared and set apart for payment before any sum shall be set apart for or applied by the Corporation or a subsidiary of the Corporation to the purchase, redemption or other acquisition of the Series C Preferred Stock or any shares of any other class of stock ranking on a parity with the Series C Preferred Stock ("Parity Stock") and before any dividend or other distribution shall be paid or declared and set apart for payment on any Junior Stock and before any sum shall be set aside for or applied to the purchase, redemption or other acquisition of Junior Stock.

(c) Dividends on all shares of the Series C Preferred Stock shall begin to accrue and be cumulative from and after the date of issuance thereof. A dividend period shall be deemed to commence on the day following a dividend payment date herein specified and to end on the next succeeding dividend payment date herein specified.

3. Liquidation and Mandatory Redemption Rights.

(a) Upon the dissolution, liquidation or winding-up of the Corporation, whether voluntary or involuntary, and after payment of all amounts that holders of Series B Preferred Stock shall be entitled to receive upon such dissolution, liquidation or winding-up of the Corporation, the Holders of the Series C Preferred Stock shall be entitled to receive before any payment or distribution shall be made on the Junior Stock, out of the assets of the Corporation available for distribution to stockholders, the Stated Value per share of Series C Preferred Stock and all accrued and unpaid dividends to and including the date of payment thereof. Unless otherwise provided in Section 4(b) of the Series B Designations, upon the payment in full of all amounts due to the Holders of the Series B Preferred Stock and the Holders of the Series C Preferred Stock, the Holders of the Common Stock of the Corporation and any other class of Junior Stock shall be entitled to receive all remaining assets of the Corporation legally available for distribution. If the assets of the Corporation available for distribution to the Holders of the Series C Preferred Stock shall be insufficient to permit payment in full of the amounts payable as aforesaid to the Holders of Series C Preferred Stock upon such liquidation, dissolution or winding-up, whether voluntary or involuntary, the holders of Series C Preferred Stock shall share ratably in any distribution of such remaining assets in proportion to the total Series C Liquidation Amount that each of such holders would have received had there been sufficient assets and all such remaining assets of the Corporation shall be distributed to the exclusion of the Holders of shares of Junior Stock.

(b) The merger or consolidation of the Corporation with or into any other corporation or corporations or the sale or transfer by the Corporation of all or substantially all of its assets shall be deemed to be a liquidation, dissolution or winding-up of the Corporation for the purposes of this paragraph 3.

4. Conversion into Common Stock. Holders of shares of Series C Preferred Stock shall have the following conversion rights and obligations:

(a) Subject to the further provisions of this paragraph 4 each Holder of shares of Series C Preferred Stock shall have the right at any time commencing after the issuance to the Holder of Series C Preferred Stock, to convert any such shares or fractions thereof, accrued and unpaid dividends on such shares, and any other sum owed by the Corporation arising from the Series C Preferred Stock or pursuant to a subscription agreement dated September 30, 2005 or October 3, 2005 entered into by the Corporation and the Holder or Holder's predecessor in connection with the issuance of Series A 8% Cumulative Convertible Preferred Stock, $.00001 par value per share ("Subscription Agreement") (collectively "Obligation Amount") into fully paid and non-assessable shares of Common Stock of the Corporation (as defined in paragraph 4(i) below) determined in accordance with the Conversion Price provided in paragraph 4(b) below (the "Conversion Price"). All issued or accrued but unpaid dividends may be converted at the election of the Holder simultaneously with the conversion of principal amount of Stated Value of Series C Preferred Stock being converted even in circumstances where the Holder would not be entitled to such dividends in cash by operation of Section 2(a) hereof.

(b) The number of shares of Common Stock issuable upon conversion of the Obligation Amount shall equal (i) the sum of (A) the Stated Value per share being converted, (B) at the Holder's election, accrued and unpaid dividends on such share, and (C) at the Holder's election, provided that the Conversion Price is not less than the conversion price of the Series B Preferred Stock, any other sum owed by the Corporation to the Holder arising from any source including but not limited to the Series C Preferred Stock or Subscription Agreement divided by (ii) the Conversion Price. The Conversion Price as of the date of this Certificate of Designations shall be $1.00, subject to further adjustment as described herein below.

(c) Holder will give notice of its decision to exercise its right to convert the Series C Preferred Stock or part thereof by telecopying an executed and completed Notice of Conversion (a form of which is annexed as Exhibit A to the Certificate of Designation) to the Corporation via confirmed telecopier transmission or otherwise pursuant to Section 13(a) of the Subscription Agreement. The Holder will not be required to surrender the Series C Preferred Stock certificate until the Series C Preferred Stock has been fully converted. Each date on which a Notice of Conversion is telecopied to the Corporation in accordance with the provisions hereof shall be deemed a Conversion Date. The Corporation will itself or cause the Corporation's transfer agent to transmit the Corporation's Common Stock certificates representing the Common Stock issuable upon conversion of the Series C Preferred Stock to the Holder via express courier for receipt by such Holder within three (3) business days after receipt by the Corporation of the Notice of Conversion (the "Delivery Date"). In the event the Common Stock is electronically transferable, then delivery of the Common Stock must be made by electronic transfer provided request for such electronic transfer has been made by the Holder. A Series C Preferred Stock certificate representing the balance of the Series C Preferred Stock not so converted will be provided by the Corporation to the Holder if requested by Holder, provided the Holder has delivered the original Series C Preferred Stock certificate to the Corporation. To the extent that a Holder elects not to surrender Series C Preferred Stock for reissuance upon partial payment or conversion, the Holder hereby indemnifies the Corporation against any and all loss or damage attributable to a third-party claim in an amount in excess of the actual amount of the Stated Value of the Series C Preferred Stock then owned by the Holder.

In the case of the exercise of the conversion rights set forth in paragraph 4(a) the conversion privilege shall be deemed to have been exercised and the shares of Common Stock issuable upon such conversion shall be deemed to have been issued upon the date of receipt by the Corporation of the Notice of Conversion. The person or entity entitled to receive Common Stock issuable upon such conversion shall, on the date such conversion privilege is deemed to have been exercised and thereafter, be treated for all purposes as the recordholder of such Common Stock and shall on the same date cease to be treated for any purpose as the record Holder of such shares of Series C Preferred Stock so converted.

Upon the conversion of any shares of Series C Preferred Stock no adjustment or payment shall be made with respect to such converted shares on account of any dividend on the Common Stock, except that the Holder of such converted shares shall be entitled to be paid any dividends declared on shares of Common Stock after conversion thereof.

The Corporation, in connection with any conversion of Series C Preferred Stock, and payment of dividends on Series C Preferred Stock may issue a fraction of a share of its Series C Preferred Stock, or may pay such amount in cash at the stated value of the fractional portion.

The Corporation and Holder may not convert that amount of the Obligation Amount on a Conversion Date in amounts that would result in the Holder having a beneficial ownership of Common Stock which would be in excess of the sum of (i) the number of shares of Common Stock beneficially owned by the Holder and its affiliates on such Conversion Date, and (ii) the number of shares of Common Stock issuable upon the conversion of the Obligation Amount with respect to which the determination of this proviso is being made on such Conversion Date, which would result in beneficial ownership by the Holder and its affiliates of more than 4.99% of the outstanding shares of Common Stock of the Corporation. For the purposes of the proviso to the immediately preceding sentence, beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and Regulation 13d-3 thereunder. Subject to the foregoing, the Holder shall not be limited to successive exercises which would result in the aggregate issuance of more than 4.99%. The Holder may revoke the conversion limitation described in this Paragraph, in whole or in part, upon 61 days prior notice to the Corporation. The Holder may allocate which of the equity of the Corporation deemed beneficially owned by the Holder shall be included in the 4.99% amount described above and which shall be allocated to the excess above 4.99%.

(d) The Conversion Price determined pursuant to Paragraph 4(b) shall be subject to adjustment from time to time as follows:

(i) In case the Corporation shall at any time (A) declare any dividend or distribution on its Common Stock or other securities of the Corporation other than the Series C Preferred Stock or Series B Preferred Stock, (B) split or subdivide the outstanding Common Stock, (C) combine the outstanding Common Stock into a smaller number of shares, or (D) issue by reclassification of its Common Stock any shares or other securities of the Corporation, then in each such event the Conversion Price shall be adjusted proportionately so that the Holders of Series C Preferred Stock shall be entitled to receive the kind and number of shares or other securities of the Corporation which such Holders would have owned or have been entitled to receive after the happening of any of the events described above had such shares of Series C Preferred Stock been converted immediately prior to the happening of such event (or any record date with respect thereto). Such adjustment shall be made whenever any of the events listed above shall occur. An adjustment made to the Conversion Price pursuant to this paragraph 4(d)(i) shall become effective immediately after the effective date of the event.

(ii) Other than in connection with an Exempted Issuance, if at any time when the Series C Preferred Stock is outstanding, the Company shall offer, issue or agree to issue any Common Stock or securities convertible into or exercisable for shares of Common Stock (or modify any of the foregoing which may be outstanding) to any person or any entity at a price per share or conversion or exercise price per share which will be less than the Conversion Price in respect of the shares issuable upon conversion of the Series C Preferred Stock (the "Preferred Shares"), without the consent of each Holder of Series C Preferred Stock, then the Company shall issue, for each such occasion, additional shares of Common Stock to each Holder of Series C Preferred Stock so that the average per share purchase price of the shares of Common Stock issued to the Holder of Series C Preferred Stock (of only the Preferred Shares still owned by the Holder of the Series C Preferred Stock which Preferred Shares may not be publicly sold by the Holder of Series C Preferred Stock at the time of the dilutive event) is equal to such other lower price per share and the Conversion Price shall automatically be adjusted to such other lower price.

An "Exempted Issuance" shall mean (i) full or partial consideration in connection with a strategic merger, acquisition, consolidation or purchase of substantially all of the securities or assets of corporation or other entity which holders of such securities or debt are not at any time granted registration rights, (ii) the Corporation's issuance of securities in connection with strategic license agreements and other partnering arrangements so long as such issuances are not for the purpose of raising capital which holders of such securities or debt are not at any time granted registration rights, (iii) the Corporation's issuance of Common Stock or the issuances or grants of options to employees, consultants, officers and directors to purchase Common Stock pursuant to stock option plans and employee stock purchase plans duly adopted by a majority of the non-employee members of the Board of Directors of the Corporation or a majority of the members of a committee of non-employee directors established for such purpose hereto, (iv) the Corporation's issuance of the Series B Preferred Stock, shares of Common Stock upon conversion of the Series B Preferred Stock, or any other securities in exchange therefor, (v) as a result of the exercise of warrants issued to the Holders of Series C Preferred Stock on September 30, 2005 or October 3, 2005 or conversion of Series C Preferred Stock, (vi) the payment of dividends on the Series C Preferred Stock and liquidated damages, and (vii) as has been described in the reports or other written information filed with the Securities and Exchange Commission not later September 27, 2005.

(e) (i) In case of any merger of the Corporation with or into any other corporation (other than a merger in which the Corporation is the surviving or continuing corporation and which does not result in any reclassification, conversion, or change of the outstanding shares of Common Stock) then unless the right to convert shares of Series C Preferred Stock shall have terminated as part of such merger, lawful provision shall be made so that Holders of Series C Preferred Stock shall thereafter have the right to convert each share of Series C Preferred Stock into the kind and amount of shares of stock and/or other securities or property receivable upon such merger by a Holder of the number of shares of Common Stock into which such shares of Series C Preferred Stock might have been converted immediately prior to such consolidation or merger. Such provision shall also provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in sub-paragraph (d) of this paragraph 4. The foregoing provisions of this paragraph 4(e) shall similarly apply to successive mergers.

(ii) In case of any sale or conveyance to another person or entity of the property of the Corporation as an entirety, or substantially as an entirety, in connection with which shares or other securities or cash or other property shall be issuable, distributable, payable, or deliverable for outstanding shares of Common Stock, then, unless the right to convert such shares shall have terminated, lawful provision shall be made so that the Holders of Series C Preferred Stock shall thereafter have the right to convert each share of the Series C Preferred Stock into the kind and amount of shares of stock or other securities or property that shall be issuable, distributable, payable, or deliverable upon such sale or conveyance with respect to each share of Common Stock immediately prior to such conveyance.

(f) Whenever the number of shares to be issued upon conversion of the Series C Preferred Stock is required to be adjusted as provided in this paragraph 4, the Corporation shall forthwith compute the adjusted number of shares to be so issued and prepare a certificate setting forth such adjusted conversion amount and the facts upon which such adjustment is based, and such certificate shall forthwith be filed with the Transfer Agent for the Series C Preferred Stock and the Common Stock; and the Corporation shall mail to each Holder of record of Series C Preferred Stock notice of such adjusted conversion price.

(g) In case at any time the Corporation shall propose:

(i) to pay any dividend or distribution payable in shares upon its Common Stock or make any distribution (other than cash dividends) to the Holders of its Common Stock; or

(ii) to offer for subscription to the Holders of its Common Stock any additional shares of any class or any other rights; or

(iii) any capital reorganization or reclassification of its shares or the merger of the Corporation with another corporation (other than a merger in which the Corporation is the surviving or continuing corporation and which does not result in any reclassification, conversion, or change of the outstanding shares of Common Stock); or

(iv) the voluntary dissolution, liquidation or winding-up of the Corporation;

then, and in any one or more of said cases, the Corporation shall cause at least fifteen (15) days prior notice of the date on which (A) the books of the Corporation shall close or a record be taken for such stock dividend, distribution, or subscription rights, or (B) such capital reorganization, reclassification, merger, dissolution, liquidation or winding-up shall take place, as the case may be, to be mailed to the Transfer Agent for the Series C Preferred Stock and for the Common Stock and to the Holders of record of the Series C Preferred Stock.

(h) So long as any shares of Series C Preferred Stock or any Obligation Amount shall remain outstanding and the Holders thereof shall have the right to convert the same in accordance with provisions of this paragraph 4 the Corporation shall at the time of issuance of Series C Preferred Stock reserve from the authorized and unissued shares of its Common Stock 100% of the number of shares of Common Stock that would be necessary to allow the conversion of the entire Obligation Amount.

(i) The term “Common Stock” as used in this Certificate of Designation shall mean the $.00001 par value Common Stock of the Corporation as such stock is constituted at the date of issuance thereof or as it may from time to time be changed, or shares of stock of any class or other securities and/or property into which the shares of Series C Preferred Stock shall at any time become convertible pursuant to the provisions of this paragraph 4.

(j) The Corporation shall pay the amount of any and all issue taxes (but not income taxes) which may be imposed in respect of any issue or delivery of stock upon the conversion of any shares of Series C Preferred Stock, but all transfer taxes and income taxes that may be payable in respect of any change of ownership of Series C Preferred Stock or any rights represented thereby or of stock receivable upon conversion thereof shall be paid by the person or persons surrendering such stock for conversion.

(k) In addition to any other rights available to the Holder, if the Corporation fails to deliver to the Holder such certificate or certificates pursuant to Section 4(c) by the Delivery Date and if within seven (7) business days after the Delivery Date the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Common Stock which the Holder anticipated receiving upon such conversion (a "Buy-In"), then the Corporation shall pay in cash to the Holder (in addition to any remedies available to or elected by the Holder) within five (5) business days after written notice from the Holder, the amount by which (A) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (B) the aggregate Stated Value of the shares of Series C Preferred Stock for which such conversion was not timely honored, together with interest thereon at a rate of 15% per annum, accruing until such amount and any accrued interest thereon is paid in full (which amount shall be paid as liquidated damages and not as a penalty). For example, if the Holder purchases shares of Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted conversion of $10,000 of Stated Value of Series C Preferred Stock, the Corporation shall be required to pay the Holder $1,000, plus interest. The Holder shall provide the Corporation written notice indicating the amounts payable to the Holder in respect of the Buy-In.

(m) The Corporation understands that a delay in the delivery of Common Stock upon conversion of Preferred Stock in the form required pursuant to this Certificate and the Subscription Agreement after the Delivery Date could result in economic loss to the Holder. As compensation to the Holder for such loss, the Corporation agrees to pay (as liquidated damages and not as a penalty) to the Holder for such late issuance of Common Stock upon Conversion of the Series C Preferred Stock in the amount of $100 per business day after the Delivery Date for each $10,000 of Obligation Amount being converted of the corresponding Common stock which is not timely delivered. The Corporation shall pay any payments incurred under this section in immediately available funds upon demand. Furthermore, in addition to any other remedies which may be available to the Holder, in the event that the Corporation fails for any reason to effect delivery of the Common Stock by the Delivery Date, the Holder will be entitled to revoke all or part of the relevant Notice of Conversion or rescind all by delivery of a notice to such effect to the Corporation whereupon the Corporation and the Holder shall each be restored to their respective positions immediately prior to the delivery of such notice, except that the liquidated damages described above shall be payable through the date notice of revocation is given to the Corporation.

(n) In the event a Holder shall elect to convert any part of the Obligation Amount, the Corporation may not refuse conversion based on any claim that Holder or any one associated or affiliated with Holder has been engaged in any violation of law, or for any other reason, unless, an injunction from a court, on notice, restraining and or enjoining conversion of all or part of such Obligation Amount shall have been sought and obtained by the Corporation and the Corporation has posted a surety bond for the benefit of such Holder in the amount of 120% of the amount of the Obligation Amount which are sought to be subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the dispute and the proceeds of which shall be payable to such Holder to the extent Holder obtains judgment.

(o) Commencing after the Actual Effective Date (as defined in the Subscription Agreement), provided an Event of Default has not occurred, and provided further that no Series B Preferred Stock is outstanding, whether or not such Event of Default has been cured, the Corporation will have the option of prepaying the Obligation Amount ("Optional Redemption"), in whole or in part, by paying to the Holder a sum of money equal to one hundred twenty percent (120%) of the Obligation Amount to be redeemed (the "Redemption Amount"). The Corporation's election to exercise its right to prepay must be by notice in writing ("Notice of Redemption") and made proportionately to all Holders of Series C Preferred Stock. The Notice of Redemption shall specify the date for such Optional Redemption (the "Redemption Payment Date"), which date shall be not less than thirty (30) business days after service of the Notice of Redemption (the "Redemption Period"). A Notice of Redemption shall not be effective with respect to any portion of the Obligation Amount for which the Holder has a pending election to convert pursuant to Section 4 hereof, or for conversions initiated or made by the Holder during the Redemption Period. On the Redemption Payment Date, the Redemption Amount less any portion of the Redemption Amount against which the Holder has exercised its rights pursuant to Section 4, shall be paid in good funds to the Holder. In the event the Corporation fails to pay the Redemption Amount on the Redemption Payment Date as set forth herein, then (i) such Notice of Redemption will be null and void, (ii) the Corporation will have no further right to deliver a Notice of Redemption, and (iii) the Corporation's failure may be deemed by the Holder to be a non-curable Event of Default.

5. Voting Rights. The Holder of shares of Series C Preferred Stock shall not have voting rights.

6. Restrictions and Limitations.

(a) Amendments to Charter. The Corporation shall not without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the then outstanding shares of Series C Preferred Stock (voting together as a single class):

(i) change the relative seniority rights of the holders of Series C Preferred Stock as to the payment of dividends in relation to the holders of any other capital stock of the Corporation, or create any other class or series of capital stock entitled to seniority as to the payment of dividends in relation to the holders of Series C Preferred Stock other than the Series B Preferred Stock; provided that no such amendment shall increase the number of shares designated as Series B Preferred Stock or the stated value thereof without approval of the outstanding shares of Series C Preferred Stock;

(ii) reduce the amount payable to the holders of Series C Preferred Stock upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation, or change the relative seniority of the liquidation preferences of the holders of Series C Preferred Stock to the rights upon liquidation of the holders of other capital stock of the Corporation, or change the dividend rights of the holders of Series C Preferred Stock;

(iii) cancel or modify the conversion rights of the holders of Series C Preferred Stock provided for in Section 4 herein; or

(iv) cancel or modify the rights of the holders of the Series C Preferred Stock provided for in this Section 6.

(b) Amendments to this Certificate of Designations. So long as any shares of Series B Preferred Stock remain outstanding, the Corporation shall not amend this Certificate of Designations without first obtaining the approval (by vote or written consent, as provided by law) of the Requisite Holders of the Series B Preferred Stock.

7. Event of Default.

The occurrence of any of the following events of default ("Event of Default") shall, after the applicable period to cure the Event of Default, cause the dividend rate of 8% described in paragraph 2 hereof to become 20% (provided that any payment of dividends shall be in accordance with Section 2(a)) from and after the occurrence of such event:

(i) The Corporation fails to timely pay any dividend payment or the failure to timely pay any other sum of money due to the Holder from the Corporation and such failure continues for a period of seven (7) days after written notice to the Corporation from the Holder .

(ii) The Corporation breaches any material covenant, term or condition of the Subscription Agreement or in this Certificate of Designation, and if capable of being cured such breach continues for a period of seven (7) days after written notice to the Corporation from the Holder.

(iii) Any material representation or warranty of the Corporation made in the Subscription Agreement, or in any agreement, statement or certificate given in writing pursuant thereto shall prove to have been false or misleading at the time when made.

(iv) The Corporation or any of its subsidiaries shall make an assignment of a substantial part of its property or business for the benefit of creditors, or apply for or consent to the appointment of a receiver or trustee for it or for a substantial part of its property or business, or such a receiver or trustee shall otherwise be appointed.

(v) Any money judgment, confession of judgment, writ or similar process shall be entered against the Corporation, a subsidiary of the Corporation, or their property or other assets for more than $100,000, and is not vacated, satisfied, bonded or stayed within 45 days.

(vi) Bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by the Corporation or if instituted against the Corporation or any of its subsidiaries, is not dismissed within 45 days.

(vii) An order entered by a court of competent jurisdiction, or by the Securities and Exchange Commission, or by the National Association of Securities Dealers, preventing purchase and sale transactions in the Corporation’s Common Stock for a period of five or more consecutive trading days.

(viii) The Corporation's failure to deliver to the Holder Common Stock or a replacement Preferred Stock certificate within ten (10) business days of the required delivery date, if so required.

(ix) The occurrence and continuation of a Non-Registration Event as described in Section 11.4 of the Subscription Agreement for a period of forty-five (45) days.

(x) Delisting of the Common Stock from the OTC Bulletin Board ("OTCBB") or such other principal market or exchange on which the Common Stock is listed for trading, if the Common Stock is not quoted or listed on such market or exchange, or quoted on the automated quotation system of a national securities association or listed on a national securities exchange, within ten (10) trading days after such delisting.

(xi) The Corporation fails to reserve the amount of Common Stock required to be reserved pursuant to Section 4(h) hereof.

(xii) A default by the Corporation of a material term, covenant, warranty or undertaking of any other agreement to which the Corporation and Holder are parties, or the occurrence of a material event of default under any such other agreement, in each case, which is not cured after any required notice and/or cure period.

(xiii) Upon the occurrence of a Change in Control. A "Change in Control" shall mean (i) the Corporation becoming a Subsidiary of another entity, (ii) a majority of the board of directors of the Corporation as of the Issue Date of Series C Preferred Stock or successors appointed by the board of directors having a majority consisting of such persons or their successors no longer serving as directors of the Corporation except due to natural causes, (iii) if any person or entity other than officers or directors or persons or entities beneficially owning more than ten percent (10%) or more of the voting power of outstanding capital stock of the Corporation as of the Issue date of Series C Preferred Stock, acquires fifty percent (50%) or more of the voting power of outstanding capital stock of the Corporation, (iv) the sale, lease or transfer of substantially all the assets of the Corporation or Subsidiaries.

8. Status of Converted or Redeemed Stock. In case any shares of Series C Preferred Stock shall be redeemed or otherwise repurchased or reacquired, the shares so redeemed, converted, or reacquired shall resume the status of authorized but unissued shares of Preferred Stock and shall no longer be designated as Series C Preferred Stock.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Designations to be duly executed by its undersigned officer thereunto duly authorized, this 2nd day of May, 2007.

NOVELOS THERAPEUTICS, INC.

By: /s/ Harry S. Palmin

Harry S. Palmin, President

EXHIBIT A

NOTICE OF CONVERSION

(To Be Executed By the Registered Holder in Order to Convert the Series C Convertible Preferred Stock of Novelos Therapeutics, Inc.)

The undersigned hereby irrevocably elects to convert $_____ of the Stated Value of the above Series C Convertible Preferred Stock into shares of Common Stock of Novelos Therapeutics, Inc. (the "Corporation") according to the conditions hereof, as of the date written below.

Date of Conversion:_____

Applicable Conversion Price Per Share:_____

Number of Common Shares Issuable Upon This Conversion:_____

Select one:

☐ A Series C Convertible Preferred Stock certificate is being delivered herewith. The unconverted portion of such certificate should be reissued and delivered to the undersigned.

☐ A Series C Convertible Preferred Stock certificate is not being delivered to Novelos Therapeutics, Inc.

Signature:_____

Print Name:_____

Address:_____

_____

Deliveries Pursuant to this Notice of Conversion Should Be Made to:

_____

_____

_____

Exhibit 31.1

CERTIFICATION

I, HARRY S. PALMIN, certify that:

1. I have reviewed this quarterly report on Form 10-QSB 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 small business issuer as of, and for, the periods presented in this report;

4. The small business issuer'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)) for the small business issuer 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 small business issuer, 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) Evaluated the effectiveness of the small business issuer'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

   (c) Disclosed in this report any change in the small business issuer's internal control over financial reporting that occurred during the small business issuer's most recent fiscal quarter (the small business issuer's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and

5. The small business issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the small business issuer's auditors and the audit committee of the small business issuer'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 small business issuer'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 small business issuer's internal control over financial reporting.

Date: August 10, 2007

/s/ Harry S. Palmin

Harry S. Palmin
President, Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, GEORGE R. VAUGHN, certify that:

1. I have reviewed this quarterly report on Form 10-QSB 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 small business issuer as of, and for, the periods presented in this report;

4. The small business issuer'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)) for the small business issuer 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 small business issuer, 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) Evaluated the effectiveness of the small business issuer'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

   (c) Disclosed in this report any change in the small business issuer's internal control over financial reporting that occurred during the small business issuer's most recent fiscal quarter (the small business issuer's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the small business issuer's internal control over financial reporting; and

5. The small business issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the small business issuer's auditors and the audit committee of the small business issuer'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 small business issuer'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 small business issuer's internal control over financial reporting.

Date: August 10, 2007

/s/ George R. Vaughn
George R. Vaughn
Chief Financial 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-QSB of Novelos Therapeutics, Inc., (the "Company") for the quarter ended June 30, 2007, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned chief executive officer of the Company certifies, to his best knowledge and belief, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

/s/ Harry S. Palmin
Harry S. Palmin
President, Chief Executive Officer

Date: August 10, 2007

EXHIBIT 32.2

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

In connection with the Quarterly Report on Form 10-QSB of Novelos Therapeutics, Inc., (the "Company") for the quarter ended June 30, 2007, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned chief financial officer of the Company certifies, to his best knowledge and belief, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

/s/ George R. Vaughn
George R. Vaughn
Chief Financial Officer

Date: August 10, 2007