

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No.)***

NOVELOS THERAPEUTICS, INC.

(Name of Issuer)

COMMON STOCK, \$0.00001 PAR VALUE PER SHARE

(Title of Class of Securities)

67000M100

(CUSIP Number)

November 30, 2010

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule 13G is filed:

- ☐ Rule 13d-1(b)
- ☒ Rule 13d-1(c)
- ☐ Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 67000M100

1 Name of Reporting Persons. I.R.S. Identification Nos. of Above Persons (entities only):

Xmark Opportunity Partners, LLC

2 Check the Appropriate Box if a Member of (a) ☐
 a Group (See Instructions)

(b) ☐

3 SEC Use Only

4 Citizenship or Place of Organization: Delaware, United States

Number of Shares 5 Sole Voting Power: 34,311,724**

Beneficially Owned by 6 Shared Voting Power: 0**

Each Reporting Person With

7 Sole Dispositive Power: 34,311,724**

8 Shared Dispositive Power: 0**

9 Aggregate Amount Beneficially Owned by Each Reporting Person: 34,311,724**

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions):

11 Percent of Class Represented by Amount in Row (9): 7.6%**

12 Type of Reporting Person (See Instructions): IA

**Xmark Opportunity Partners, LLC ("Opportunity Partners") is the sole member of the investment manager of Xmark Opportunity Fund, L.P., a Delaware limited partnership ("Opportunity LP"), and Xmark Opportunity Fund, Ltd., a Cayman Islands exempted company ("Opportunity Ltd."), and, as such, possesses the sole power to vote and the sole power to direct the disposition of all securities of Novelos Therapeutics, Inc., a Delaware corporation (the "Company"), held by Opportunity LP and Opportunity Ltd. Opportunity Partners is also the investment manager of Xmark JV Investment Partners, LLC, a Delaware limited liability company ("JV Partners"), and, as such, possesses the sole power to vote and the sole power to direct the disposition of all securities of the Company held by JV Partners. David C. Cavalier and Mitchell D. Kaye, the Co-Managing Members of Xmark Capital Partners, LLC, the Managing Member of Opportunity Partners, share voting and dispositive power with respect to all securities beneficially owned by Opportunity Partners.

As of November 30, 2010, (i) Opportunity LP held 8,057,191 common shares, \$0.00001 par value per share (the “Common Shares”), of the Company, (ii) Opportunity Ltd. held 15,664,806 Common Shares of the Company and (iii) JV Partners held 10,589,727 Common Shares of the Company. In addition, Opportunity LP, Opportunity Ltd. and JV Partners held warrants to respectively purchase up to 380,794, 739,008 and 507,992 Common Shares of the Company (collectively, the “Xmark Warrants”). The Xmark Warrants each contain an issuance limitation prohibiting Opportunity Partners from exercising the Xmark Warrants to the extent that such exercise would result in beneficial ownership by Opportunity Partners of more than 4.99% of the Company’s Common Shares then issued and outstanding (the “4.99% Issuance Limitation”). The 4.99% Issuance Limitation may be waived by Opportunity Partners upon 61 days’ prior notice to the Company.

Based on information received from the Company as of November 30, 2010, there were 452,866,983 Common Shares of the Company issued and outstanding. As a result of the foregoing, for purposes of Reg. Section 240.13d-3, Opportunity Partners is deemed to beneficially own 34,311,724 Common Shares of the Company, or 7.6% of the Common Shares of the Company deemed issued and outstanding as of November 30, 2010. Opportunity Partners’ interest in the securities reported herein is limited to the extent of its pecuniary interest in Opportunity LP, Opportunity Ltd. and JV Partners, if any.

Item 1(a). Name Of Issuer: Novelos Therapeutics, Inc.

Item 1(b). Address of Issuer's Principal Executive Offices:

One Gateway Center, Suite 504
Newton, Massachusetts 02458
Attention: Chief Executive Officer

Item 2(a). Name of Person Filing:

Xmark Opportunity Partners, LLC

Item 2(b). Address of Principal Business Office or, if None, Residence:

90 Grove Street, Suite 201
Ridgefield, Connecticut 06877

Item 2(c). Citizenship:

Xmark Opportunity Partners, LLC is a Delaware limited liability company.

Item 2(d). Title of Class of Securities: Common Stock, \$0.00001 par value per share

Item 2(e). CUSIP No.: 67000M100

Item 3. If This Statement Is Filed Pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the Person Filing is a:

Not Applicable.

Item 4. Ownership

(a) Amount Beneficially Owned: 34,311,724**

(b) Percent of Class: 7.6%**

(c) Number of Shares as to which the person has:

(i) sole power to vote or to direct the 34,311,724**
vote

- (ii) shared power to vote or to direct the vote 0**
- (iii) sole power to dispose or to direct the 34,311,724**
disposition of
- (iv) shared power to dispose or to direct the 0**
disposition of

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the owner of more than five percent of the class of securities, check the following: ☐

Item 6. Ownership of More Than Five Percent on Behalf of Another Person

Not Applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person

Not Applicable.

Item 8. Identification and Classification of Members of the Group

Not Applicable.

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Item 9. Notice of Dissolution of Group

Not Applicable.

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

December 10, 2010

XMARK OPPORTUNITY PARTNERS, LLC

By: XMARK CAPITAL PARTNERS, LLC,
its Managing Member

By: /s/ Mitchell D. Kaye
Mitchell D. Kaye
Co-Managing Member

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)
