

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**SCHEDULE 13G**

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

**Omeros Corporation**

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(Name of Issuer)

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Common Stock, \$0.01 par value  
(Title of Class of Securities)

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682143 102  
(CUSIP Number)

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December 31, 2009  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule 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).

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CUSIP No. 682143 102

<b>(1)</b>	NAMES OF REPORTING PERSONS Gregory A. Demopulos, M.D.	
<b>(2)</b>	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
<b>(3)</b>	SEC USE ONLY	
<b>(4)</b>	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	<b>(5)</b>	SOLE VOTING POWER 2,552,500 <sup>1</sup>
	<b>(6)</b>	SHARED VOTING POWER -0-
	<b>(7)</b>	SOLE DISPOSITIVE POWER 2,552,500 <sup>1</sup>
	<b>(8)</b>	SHARED DISPOSITIVE POWER -0-
<b>(9)</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,552,500 <sup>1</sup> shares of Common Stock, \$0.01 par value	
<b>(10)</b>	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
<b>(11)</b>	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 11.4% <sup>2</sup>	
<b>(12)</b>	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

<sup>1</sup> Includes 1,077,220 shares of common stock that Dr. Demopulos has the right to acquire from the issuer within sixty days of December 31, 2009 pursuant to the exercise of option awards.

<sup>2</sup> Based on shares outstanding as of November 16, 2009 as reported on the issuer's quarterly report on Form 10-Q filed on November 19, 2009.

**Item 1.**

- (a) Name of Issuer:  
Omeros Corporation
- (b) Address of issuer's principal executive offices:  
1420 Fifth Avenue, Suite 2600  
Seattle, WA 98101

**Item 2.**

- (a) Name of person filing:  
Gregory A. Demopoulos, M.D.
- (b) Address or principal business office or, if none, residence:  
1420 Fifth Avenue, Suite 2600  
Seattle, WA 98101
- (c) Citizenship:  
United States
- (d) Title of class of securities:  
Common Stock, \$0.01 par value
- (e) CUSIP No.:  
682143 102

**Item 3.**

If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

- (a)  Broker or dealer registered under Section 15 of the Act;
- (b)  Bank as defined in Section 3(a)(6) of the Act;
- (c)  Insurance company as defined in Section 3(a)(19) of the Act;
- (d)  Investment company registered under Section 8 of the Investment Company Act of 1940;
- (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
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- (g) o A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) o A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) o A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940;
- (j) o A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J);
- (k) o Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

If filing as a non-U.S institution in accordance with Rule 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

**Item 4. Ownership**

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned:  
2,552,500 shares<sup>3</sup>
- (b) Percent of class:  
11.4%<sup>4</sup>
- (c) Number of shares as to which the person has:
  - (i) Sole power to vote or to direct to vote  
2,552,500 shares<sup>3</sup>
  - (ii) Shared power to vote or to direct to vote  
-0- shares
  - (iii) Sole power to dispose or to direct the disposition of  
2,552,500 shares<sup>3</sup>

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<sup>3</sup> Includes 1,077,220 shares of common stock that Dr. Demopoulos has the right to acquire from the issuer within sixty days of December 31, 2009 pursuant to the exercise of option awards.

<sup>4</sup> Based on shares outstanding as of November 16, 2009 as reported on the issuer's quarterly report on Form 10-Q filed on November 19, 2009.

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- (iv) Shared power to dispose or to direct the disposition of  
-0- shares

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

Not applicable.

**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.

**Item 9. Notice of Dissolution of Group**

Not applicable.

**Item 10. Certifications**

Not applicable.

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*Signature*

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

Date: February 11, 2010

/s/ Gregory A. Demopoulos, M.D.