

Mail Stop 4720

June 30, 2009

Gregory A. Demopulos, M.D.
President, Chief Executive Officer,
Chief Medical Officer and
Chairman of the Board of Directors
Omeros Corporation
1420 Fifth Avenue, Suite 2600
Seattle, WA 98101

**Re: Omeros Corporation
Amendment No. 4 to Registration Statement on Form S-1/A
Filed June 23, 2009
File No. 333-148572**

Dear Dr. Demopulos:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Amendment No. 4 to Form S-1/A

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 42

Critical Accounting Policies and Significant Judgments and Estimates, page 46

Stock-Based Compensation, page 47

Common Stock Fair Value, page 48

1. Please refer to our prior comment number one. In determining how you determined the companies were similar, please tell us what consideration was given to (a) the size of the entities considered, (2) stage of life cycle (i.e. whether these entities were considered development stage enterprises under SFAS 7), and (c) financial leverage. Refer to Question 6 of SAB Topic 14D. Lastly, you state that "the Company reviews and modifies its peer group based on changes to the Company's business and changes to the businesses of the companies in its peer group." Please tell us whether these companies remained in the peer group for the entire duration, and whether there were any companies were added and removed, and if so, the timing and reason for doing so.

Fair Value Measurement of Financial Instruments, page 55

2. We have reviewed your response to our prior comment number two and have the following comments:
 - a. With respect to part (b), please revise your disclosure to clarify whether you made any adjustments to the quotes or prices you obtained from primary and secondary broker/dealers, and if so, please elaborate on the circumstance surrounding the adjustments; and
 - b. As previously requested in part (e) of our comment, please tell us what procedures you performed to validate the prices you obtained to ensure the fair value determination is consistent with SFAS 157, Fair Value Measurements, and to ensure that you properly classified your assets and liabilities in the fair value hierarchy.

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As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert this action as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

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We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Tabatha Akins at (202) 551-3658 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Rose Zukin at (202) 551-3239 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Craig E. Sherman, Esq.
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