Mail Stop 6010

April 16, 2008

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. 1 to Registration Statement on Form S-1
Filed April 1, 2008
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. 1 to Form S-1

Prospectus Summary

General

1. We note your response to Comment 8 and reissue the comment in part. Please note that the staff is not looking for a level of detail that would be inappropriate for a summary description of your company. Please expand your Prospectus Summary section briefly to include information similar to the paragraphs you added on pages 81 and 111 of your filing.

    a. Specifically, please identify the technology developed by affiliates of the company, and the terms of its transfer to the company.
    b. Please further provide additional disclosure briefly explaining the material terms of the transfer transaction, as well as the rights that were acquired. This disclosure should include any underlying material patents.

    A brief explanation of how the registrant has acquired its technology and product pipeline is essential to an understanding of the company, and how it operates.

Risk Factors

"If we raise additional capital through debt financing, the terms of our debt . . .," page 13

2. We note your response to Comment 13 and reissue the comment in part. Please expand your disclosure in this risk factor to discuss the negative effects of issuing debt securities on the rights of shareholders. We note that you discuss this in the immediately preceding risk factor, but this discussion will better benefit the reader in this risk factor.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 38

Overview, page 38

Research and Development Expenses, page 39

3. We have reviewed your response to our prior comment number 29 and have the following comments:

    a. Please reconcile the allocation of R&D expense to both the total R&D and IPR&D expenses recognized during each period presented.
    b. As previously requested, please include a discussion of the nature and timing of the efforts necessary to complete the projects; and
    c. As included in your response letter, please revise your disclosure to state that you are unable to estimate with any certainty when it would recognize any net cash inflows from its projects.

Critical Accounting Policies and Significant Judgments and Estimates, page 42

Stock-Based Compensation, page 43

Common Stock Fair Value, page 44

4. We have reviewed your response to our prior comment number 30 and have the following comments:

    a. Please revise your disclosure to include a table quantifying the ranges of enterprise values for each comparable company considered and the actual enterprise value used at each valuation date. Clarify in the filing how the ranges were determined and how the ranges were used to derive the enterprise value at each valuation date. Further, please clarify in the filing how you assigned weights to the low and high ends of the range.
    b. With respect to part d of our prior comment, it is still unclear why the value was significantly higher than that of the preferred shares. Expand on the "rights, preferences, and privileges" that would substantiate obtained the preferred stock holders that would substantiate the difference in the values.
    c. With respect to parts e and f of our prior comment, please note that we may have additional comments related to the valuations used and discussed in the response when the price range for the offering becomes known.

Business

General

5. We note your response to Comment 33 and reissue the comment in part. Please describe in the Business section the material terms of your acquisition of Nura, Inc. This disclosure should include:

    a. The date of the acquisition;
    b. The identity of the seller;
    c. The equity and debt issued to fund the acquisition;
    d. The amount of any cash portion of the consideration;
    e. The source of cash;
    f. The amount of debt assumed, if any;
    g. The amount and nature of any continuing or contingent obligations of either seller or purchaser; and
    h. The specific programs in the CNS pipeline you acquired.

Strategy, page 57

6. We note your response to Comment 35 and reissue the comment in part. We note that you expanded your disclosure to identify your pipeline of preclinical development programs. Please further expand your disclosure to identify the market that each preclinical development program targets.

Inflammation Programs, page 58

7. Please disclose whether there are any provisions in the exclusive license agreements with the University of Leicester and MRC that would permit any party to terminate the agreements before their terms end.

8. We note your disclosure on page 73 that states that under your exclusive license agreement, you are obligated to pay royalties based on any proceeds you receive from sales to the University of Leicester and MRC. Please expand your disclosure to disclose the potential range of royalty payments (for example, "low-single-digits" or "high-single-digits") and the length of time you would be required to continue making those royalty payments under this agreement.

9. We note your disclosure on page 75 that under the terms of your funding agreement with SMRI, "[you] have agreed to pay royalties to SMRI based on any net income [you] receive from sales of a PDE10 product until [you] have paid a maximum aggregate amount that is based on the amount of grant funding that [you] have received from SMRI."

    a. Please revise to disclose that the maximum aggregate amount that you must pay on a yearly basis in the form of royalties is based upon the amount and timing of grant funding that you receive, how soon they are paid back in the form of royalties, and that the amount will be in excess of the amount of grant funding you receive.
    b. Please further disclose the maximum aggregate amount that you must pay each year if you repay all the grant funds received within the shortest period specified in the agreement from the date of receipt, or if you repay all the grant funds received within the longest period specified in the agreement, set forth in the table on page 10 of Exhibit 10.33, from the date of receipt, assuming you receive the maximum amount of funding.

    This information is material to a reader's understanding of your obligations as a whole under the agreement. We are not asking that you disclose the three time periods set forth in the table on page 10 of Exhibit 10.33.

10. We note your response to Comment 43 and reissue the comment in part. Please expand your disclosure of the Chondroprotective program to state that, because of the risks and uncertainties inherent in a preclinical development program, you are unable to disclose with reasonable certainty when you expect to select a clinical candidate from this program.

11. We note your response to Comment 44 and reissue the comment in part. If you are required by the funding agreement to pay a minimum dollar amount to SMRI in royalties, please disclose this minimum amount. The staff has taken the position that such information is material to an investor, and accordingly must be disclosed.

12. We note your response to Comment 46 and reissue the comment in part. We note your disclosure on page 76 that you have 10 pending foreign patent application that are directed to your other CNS programs, and that you intend to file additional patent applications in key foreign markets. Please expand your disclosure to name the foreign countries in which you believe your product will have a significant market.

Manufacturing, page 77

13. We note your response to Comment 48 and reissue the comment in part. We note your statement that the term of the commercial supply agreement you have with Hospira Worldwide continues past the commercial launch of OMS103HP for a multi-year period that may be extended upon mutual agreement. Please further describe the termination provisions of your agreement with Hospira Worldwide, such as whether any party may terminate the agreement for any reason prior to the commercial launch of this product candidate.

14. We note your response to Comment 49 and reissue the comment in part. It is not clear how you are supplied with the three APIs used in OMS103HP, a product candidate that is currently in Phase 3 clinical trials, if you have no ongoing contractual obligations to the three suppliers you mention in the risk factor on page 78. Please explain this apparent inconsistency.

Executive Compensation

Compensation Discussion and Analysis, page 91

15. We note your response to Comment 53 and reissue the comment in part. You state on page 92 that in the past, you have partly determined the level for each element of compensation based on the contributions that each executive officer is *expected* to make to your success. However, also in that paragraph on page 92, you state that you have not historically established specific individual objectives in setting compensation levels regarding the various components of your compensation package. Please revise your filing to clarify this inconsistency. Please further expand your disclosure to discuss the specific expected contributions of Dr. Demopulos and Ms. Kelbon that were used in setting their compensation.

16. We note your response to Comment 54 and reissue the comment in part. Please disclose on page 92 the identities of the comparable biotechnology and pharmaceutical companies which you reviewed in the last year for each of the NEOs. Please further expand your disclosure on page 92 to state that the comparable biotechnology and pharmaceutical companies which you reviewed to partly determine compensation vary from period to period and from executive to executive. This additional disclosure is material to the investor's understanding of your process for determining the level for each element of compensation.

Index to Financial Statements, page F-1

Notes to Consolidated Financial Statements, page F-12

Note 2 – Investments, page F-21

17. We acknowledge your response to our prior comment number 57. Please tell us your basis for stating that the adjustable rate feature makes these securities "similar to a one-year government security".

18. Please supplement your disclosure to include a discussion of how the fair market value of the mortgage backed securities is determined. Include a discussion of key drivers used in the pricing of these securities.

Note 5 – Acquisition of nura, page F-27

19. We have reviewed your response to our prior comment number 58 and have the following comments:

a. Please revise your disclosure to include a quantitative and qualitative discussion of the assumptions and methodologies used to value the preferred stock issued in conjunction with this transaction.
b. With respect to parts (a) and (c) of your response, your response appears to assert that the Series E convertible preferred stock was not issued at fair value at certain points during the offering period. Please confirm that our understanding is correct. In so doing, please reconcile that statement, with your disclosure on page 44, which states that the convertible preferred stock was sold to outside investors in arms-length transactions. Further, please explain why these transactions do not appear to represent the amount at which a willing party would have bought the shares, as contemplated by CON 7.

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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.

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, Michael Reedich at (202) 551-3612, 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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