Mail Stop 6010

February 6, 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
Registration Statement on Form S-1
Filed January 9, 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.

General

1. Please note that our comments on your request for confidential treatment will be provided under separate cover.

2. Please note that when you file a pre-effective amendment containing pricing-related information, we may have additional comments. As you are likely aware, you must file this amendment prior to circulating the prospectus.

3. Please note that when you file a pre-effective amendment that includes your price range, it must be bone fide. We interpret this to mean that your range may not exceed $2 if you price below $20 and 10% if you price above $20.

4. Please note that where we provide examples to illustrate what we mean by our comments, they are examples and not complete lists. If our comments are applicable to portions of the filing that we have not cited as examples, please make the appropriate changes in accordance with our comments.

5. Please provide us proofs of all graphic, visual or photographic information you will provide in the printed prospectus prior to its use.

6. Please revise your filing to use the long form of the acronym "API," as it appears you have created it for use in the prospectus.

Market Data, page i

7. We note your statement on the bottom of page i, "Market data publications and reports generally indicate that their information has been obtained from sources believed to be reliable, but do not guarantee the accuracy and completeness of their information." This implies that you do not have to take responsibility for information from third parties you include in the prospectus. Please remove this language, or expand your disclosure to state that you are responsible for the information found in your prospectus.

Prospectus Summary

General

8. Please expand your Prospectus Summary section briefly to explain how you developed your technology platform and intellectual property.

    a. To the extent that this was developed in-house, please identify the technology.

    b. To the extent the technology may have been developed by affiliates of the company, for example, Dr. Demopulos, you should identify the technology developed and the terms of its transfer to the company.

c. To the extent the technology and intellectual property were acquired through licensing and collaboration agreements or through acquisitions, please provide additional disclosure briefly identifying the material agreements or transactions, and explain the material terms of these licensing and development agreements or transactions, as well as the rights that were acquired. This disclosure should include any underlying material patents.

d. To the extent that you provide further disclosure in the Prospectus Summary, please expand your Business Section to include this information if it is not already disclosed.

Market Opportunity, page 2

9. We note your disclosure that you commissioned reports from a reimbursement consulting firm. Please provide the name of the consulting firm, and file as an exhibit the written consent of the consulting firm to the use of their name in accordance with Section 7 of the Securities Act of 1933.

Risk Factors

General

10. Please add a risk factor stating that you do not intend to pay dividends in the foreseeable future. Please clearly state in this risk factor that readers should not rely on an investment in your company if they require dividend income and income to them would only come from any rise in the market price of your stock, which is uncertain and unpredictable.

"If we fail to obtain additional financing, we may be unable to complete . . .", page 12

11. To the extent practicable, please quantify the additional funding that you will require in the next 12 months.

12. Please clarify in your filing whether you have any commitments to obtain any additional funds.

13. We note your disclosure that you may obtain additional financing by issuing debt securities. Please separate this risk factor into two risk factors, with the additional risk factor discussing the negative effects of issuing debt securities on the rights on shareholders and on the ability of the registrant to conduct its business. This additional risk factor should immediately follow the above risk factor.

"We rely on third parties to conduct our preclinical research . . .", page 14

14. Please identify the third parties on which you rely to conduct a portion of your clinical research, and match the research project to the third party which conducts such research.

15. We note your disclosure that the unnamed third parties have contractual duties. Please describe the contracts you have with these third parties in the Business Section, and file these agreements as exhibits, or provide us with an analysis supporting your determination that the agreements are not required to be filed pursuant to Item 601 (b)(10) of Regulation S-K.

"If we are unable to establish sales and marketing capabilities . . .", page 14

16. Please revise the discussion to indicate when you believe you will need to obtain sales and marketing services.

"If the contract manufacturers that we rely on experience difficulties . . .", page 15

17. Please expand this risk factor to discuss failed inspections, if applicable.

"Ingredients necessary to manufacture our PharmacoSurgery product candidates . . .," page 16 and "Our ability to pursue the development and commercialization of product candidates . . .", page 17

18. It is not clear if you currently have any agreements with third-party suppliers. If you do not, please clarify that you are referring to potential future agreements. If you currently have agreements with third-party suppliers, they should be described in the Business Section and then filed as exhibits in accordance with Item 601 (b)(1) of Regulation S-K.

"We may need licenses for active ingredients from third parties so that we can develop . . .", page 16

19. Please clarify your disclosure to discuss whether you intend to use active ingredients in any of your product candidates that are proprietary to one or more third parties. If you do intend to do so, please disclose when you plan to enter into license negotiations. Please further identify the active ingredients that are proprietary, and the products of which they are apart, if any.

"We may incur substantial costs as a result of litigation or other proceedings . . .", page 20

20. We note your disclosure that you "have conducted searches of third-party patents with respect to [your] OMS103HP, OMS302, OMS 201, MASP-2, Chondroprotective, PDE10, GPCR and other CNS programs." This statement appears to conflict with your disclosure on page 17 discussing a potential conflict with Aarhus Universitet over a patent it holds relating to MASP-2. Please reconcile these apparently inconsistent statements.

"We use hazardous materials in our business and must comply . . .", page 21

21. Please expand this risk factor to discuss any contaminations you have experienced, if applicable.

22. Please disclose whether your contamination expenses are covered by insurance. If they are not, please revise your risk factor to clarify that you do not have insurance to cover contamination expenses.

Our management has identified material weaknesses in our internal controls . . .", page 22

23. Please disclose whether there were any material weaknesses related to the policies and procedures that:

    a. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect your transactions and dispositions of your assets;

    b. provide reasonable assurance that your receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and

    c. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

24. Please elaborate on your discussion of the steps that you are undertaking to improve your internal controls to describe the specific steps being undertaken to address each of the material weaknesses and significant deficiencies identified by your auditors. More specifically, please disclose the specific improvements you intend to make to your periodic financial statement close process.

"If securities or industry analysts do not publish research reports . . .", page 28

25. Please remove this risk factor, as it is a risk that is not specific to your business, but applicable to all businesses. Alternatively, revise your discussion to clarify why you believe you may experience consequences that are different or more severe than other types of businesses.

Special Note Regarding Forward-Looking Statements, page 29

26. We note your disclosure on page 30 which states, "Given these uncertainties, you should not place undue reliance on these forward-looking statements." This implies that you do not have to take responsibility for information you include in the prospectus. Please remove this language, or expand your disclosure to state that you are responsible for the information found in your prospectus.

Use of Proceeds, page 31

27. We note your disclosure in the third bullet point on page 31 that states, "approximately $___ to fund the clinical development of [your] other PharmacoSurgery product candidates, OMS302 and OMS201." Please expand this statement to disclose where in the process of developing OMS302 and OMS201 you expect the application of these proceeds will take you.

Selected Consolidated Financial Data, page 36

28. Revise your disclosure here to include the pro forma amounts for the consolidated statements of operations and consolidated balance sheet data for December 31, 2006 and September 30, 2007.

Management's Discussion and Analysis of Financial Condition

Overview

Research and Development Expenses, page 39

29. Please expand your disclosure by referring to the Division of Corporation Finance "Current Issues and Rulemaking Projects Quarterly Update" under section VIII – Industry Specific Issues – Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address: http://www.sec.gov/divisions/corpfin/cfcrq032001.htm#secviii.

    Please disclose the following information for each of your major research and development projects:

a. The costs incurred from the inception period to date on the project;

b. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the various projects;

c. The nature and timing of the efforts necessary to complete the project;

d. The period in which material net cash inflows from significant projects are expected to commence.

Critical Accounting Policies and Significant Judgments and Estimates

Stock-Based Compensation, page 32

Common Stock Fair Value, page 43

30. Please expand your disclosures to include the following:

a. In all issuances where a contemporaneous valuation by an unrelated valuation specialist was not performed please disclose why management did not select this valuation alternative.

b. Quantitatively disclose and discuss the significant factors, assumptions and methodologies used in the valuation performed by the board of directors and retrospective valuations performed for each grant date, including how the enterprise value was estimated and changed.

c. Quantitatively disclose how in applying each valuation methodology, you considered factors listed on page 43 through 45, such as the results of operations and financial position, continued advancement in the development programs, filing of an IND, and the probability of a liquidity event. Include a quantitative discussion of the probability-weighted present value of expected investment returns, considering each of the possible outcomes available as discussed on page 44.

d. Please disclose and tell us why the estimated per share fair value of the common stock between December 2006 and September 2007 was significantly less than the fair value of the Series E preferred stock issued in February 2007. Expand on the specific rights and privileges obtained the preferred stock holders that would substantiate the significant difference in the values. We note that the Series E preferred stock is convertible on a 1:1 basis.

e. Once you can reasonably estimate the IPO price, qualitatively and quantitatively discuss each significant factor contributing to the difference between each valuation and the estimated IPO price.

f. Your disclosure should also include any options granted up to the date of filing the amendment.

Contractual Obligations and Commitments, page 51

31. We note that your table summarizing your contractual obligations and commitments is dated December 31, 2006. Please disclose your contractual obligations and commitments as of December 31, 2007, as required by Item 303 (a)(5)(i) of Regulation S-K.

Business

General

32. In this section, you describe a report of The Reimbursement Group ("TRG") which found that your products will be favorably reimbursed both to surgical facilities and to surgeons. Please disclose whether TRG received reimbursement from you in preparing this report. If so, please disclose, when you refer to this report in this section, that the company hired TRG to prepare this report, and further disclose how much you paid.

33. We note your disclosure that you acquired Nura, Inc. on August 11, 2006. Please describe in this section the material terms of the acquisition.

Strategy, page 57

34. Please clarify that you do not have any partnerships with third parties regarding the commercialization of any future product or products. Please also clarify whether any of your personnel has had experience commercializing technologies and products similar to those you hope to develop.

35. We note your statement, "[W]e have built multiple development programs targeting large markets." Please expand your disclosure in this section to briefly describe your pipeline of preclinical development programs, and how combining the preclinical development programs with your PharmacoSurgery product candidates will mitigate risk to your business.

36. We note your disclosure on page 60 stating, "Should the results of the first trial indicate that one or more changes in trial design are appropriate, we intend to modify our trial design accordingly and conduct two pivotal trials in parallel." Please expand your disclosure and clarify how you expect to accomplish this. Your discussion should explain your current facility, financial, and labor capabilities.

Inflammation Programs, page 58

37. On page 60 of your filing, you state that you are conducting two Phase 3 clinical programs evaluating the efficacy and safety of OMS103HP. Please expand your disclosure to state when you anticipate completing these trials, and disclose when you plan to submit an NDA to the FDA.

38. On page 63 of your filing, you state that you have nine pending patent applications in key foreign markets that cover OMS103HP. Please expand your disclosure to name these key foreign markets.

39. On page 66 of your filing, you state that you have six pending patent applications in key foreign markets that cover OMS302. Please expand your disclosure to name these key foreign markets.

40. On page 68 of your filing, you state that you are conducting a Phase 1 clinical trial evaluating the safety and systemic absorption of OMS201. Please expand your disclosure to state when you anticipate completing this trial.

41. On page 68 of your filing, you state that you have fifteen pending patent applications in key foreign markets that cover OMS201. Please expand your disclosure to name these key foreign markets.

42. On page 69 of your filing, you state that you hold worldwide exclusive licenses to rights related to MASP-2, the antibodies targeting MASP-2 and the therapeutic applications for those antibodies. Please provide further disclosure of the licensing agreements, including aggregate payments made to date, aggregate potential payments, including milestone payments, duration and termination provisions, and any other material terms.

43. On page 70 of your filing, you state that you are conducting in vitro and in vivo preclinical studies to evaluate API combinations of cartilage breakdown inhibitors and cartilage synthesis promoters. Please expand your disclosure to state when you began studies and when you expect to select a clinical product candidate.

44. On page 71 of your filing, you state that your preclinical development of PDE10 is supported by funds from The Stanley Medical Research Institute. Please expand your disclosure to state whether you have an agreement with The Stanley Medical Research Institute regarding these funds. If so, please describe the material terms of the agreements, including all rights and obligations, milestones, funds forwarded to date, and duration and termination provisions.

45. Please also disclose when you entered into preclinical development of your PDE10 Program and when you expect to select a clinical product candidate.

46. We note your statement on page 72 that you have filed patent applications relating to your GPCR Program.

    a. Please state the number of patent applications that you have filed relating to this program.

    b. Please further disclose whether you have filed these patent applications in the United States and/or in foreign markets. If you have filed a patent application in a foreign country in which you believe your product will have a significant market, please name the foreign country.

    c. Please also provide this disclosure for your patent applications relating to your other CNS Programs, as described on page 73.

Manufacturing, page 74

47. We note your disclosure that you utilize both in-house capabilities and outside contract manufacturers to produce sufficient quantities of product candidates for use in preclinical studies.

    a. Please disclose how many contract manufacturers you currently rely on, and if you are substantially dependent on a small number of contract manufacturers, please name them.

    b. Please further disclose whether you have written agreements with any of the contract manufacturers. If you do have written agreements, please describe the material terms of the agreement, including each parties' rights and obligations under the agreement, all payments made/received to date, all potential payments, duration, termination provisions and all other material terms. Please further file the manufacturing agreement as an exhibit, or provide us with your analysis supporting your determination that it is not a material agreement and therefore not required to be filed pursuant to Item 601 (b)(10) of Regulation S-K.

48. We note that you have entered into manufacturing agreements with Catalent Pharma Solutions, Inc., Hospira Worldwide, Inc., and Althea Technologies, Inc. Please expand your disclosure in this section to describe the material terms of each agreement, including each parties' rights and obligations under the agreement, all payments made/received to date, all potential payments, duration, termination provisions and all other material terms.

49. Please identify the three suppliers of the three APIs used in OMS103HP. Please disclose when you intend to enter into commercial agreements with these suppliers.

Intellectual Property, page 76

50. We note your disclosure on page 77 that you have seven pending patent applications in key foreign markets related to your MASP-2 program. Please identify these key foreign markets in your filing.

Research and Development, page 80

51. Please disclose in this subsection the amount spent on research and development expenses for each of the last three completed fiscal years, in accordance with Item 101 (c)(1)(xi) of Regulation S-K.

Executive Compensation

Compensation Discussion and Analysis, page 86

52. In this section, please identify any compensation consultant you used in 2007, and disclose the extent to which the consultant, the compensation committee, and the CEO are involved in setting executive compensation.

53. Please expand your disclosure to discuss the extent to which individual and company objectives are used in setting compensation levels regarding the various components of your compensation packages for Dr. Demopulos, Mr. Klein, and Ms. Kelbon. Please further identify these objectives, and discuss the extent to which these objectives were met in 2007 in the case of Dr. Demopulos and Ms. Kelbon.

54. We note your disclosure on page 87 that your compensation committee will "determine whether each element of [your] executive compensation program is competitive with comparable pharmaceutical and biotechnology companies." It appears that these companies constitute a peer group. Please identify the members of this peer group, and also disclose how your compensation levels are set in relation to the compensation levels of the peer group regarding the various components of your compensation package.

55. Please discuss why you paid a discretionary cash bonus to Dr. Demopulos in 2007 but did not pay a discretionary cash bonus to Ms. Kelbon.

Index to Financial Statements

Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit), page F-7

56. Please tell us why the financing costs for your various convertible preferred stock issuances are included as a component of additional paid-in capital, when the underlying instrument is classified outside of shareholders' equity.

Notes to Consolidated Financial Statements, page F-14

Note 2 – Investments, page F-24

57. Please tell us how you determined that the mortgaged-backed securities qualified as current assets per paragraph 4 and 5 of Chapter 3A of ARB 43. In addition tell us how you determined the fair value of the mortgaged-backed securities.

Note 5 – Acquisition of nura, page F-27

58. On page F-10, you disclose that you issued Series E convertible preferred stock for $5.00 per share in 2005 and 2006. Please tell us why the shares issued in conjunction with the acquisition of nura, inc. were valued at approximately $4.15 per share and explain why the issuance of preferred stock in 2006 for cash were not a better indicator of the stock's estimated fair value.

59. Please disclose the following information here and in your discussion on page 46 regarding the in-process research and development acquired:

    a. Disclose the specific nature and fair value of each significant in-process research and development project acquired.

    b. Disclose the completeness, complexity and uniqueness of the projects at the acquisition date.

    c. Disclose the nature, timing and estimated costs of the efforts necessary to complete the projects, and the anticipated completion dates.

    d. Explain the risks and uncertainties associated with completing development on schedule, and consequences if it is not completed timely.

e. Disclose the appraisal method used to value projects and the significant appraisal assumptions, such as:

   i. the period in which material net cash inflows from significant projects are expected to commence;

   ii. material anticipated changes from historical pricing, margins and expense levels; and

f. In periods after a significant write-off, discuss the status of efforts to complete the projects, and the impact of any delays on your expected investment return, results of operations and financial condition.

Note 8 – Convertible Preferred Stock, page F-32

60. On page F-34, you disclose that the conversion rare is subject to certain adjustments. Please disclose what these adjustments are, and tell us whether such adjustments have any accounting implications.

Exhibits

61. We note that some of your exhibits are not yet filed. Please note that once you have filed the remaining agreements as exhibits, we will need time to review the documents, and we may have comments on them.

* * * * *

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.
Mark J. Handfelt, Esq.
Wilson Sonsini Goodrich & Rosati P.C.
701 Fifth Avenue, Suite 5100
Seattle, WA 98104