

Mail Stop 6010

March 15, 2007

Lloyd H. Malchow
President and Chief Executive Officer
SenoRx, Inc.
11 Columbia, Suite A
Aliso Viejo, California 92656

Re: SenoRx, Inc.
Amendment No. 4 to Registration Statement on Form S-1
Filed March 9, 2007
File No. 333-134466

Dear Mr. Malchow:

We have reviewed your registration statement and have the following comment. Where indicated, we think you should revise your document in response to this comment. 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.

Report of Independent Registered Public Accounting Firm, page F-2

Please have your auditor revise its report to include the name of the firm and required signature. Refer to Rule 2-02(a) of Regulation S-X and Item 302 of Regulation S-T.

As appropriate, please amend your registration statement in response to this comment. Please understand that we may have additional comments after reviewing your amendment and your response to our comment.

You may contact at David Burton at (202) 551-3626 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Donald C. Hunt at (202) 551-3647 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher
Assistant Director

cc (via fax): David Saul, Esq., Wilson Sonsini Goodrich & Rosati, P.C.

Lloyd H. Malchow
SenoRx, Inc.
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