



DIVISION OF  
CORPORATION FINANCE  
Mail Stop 3030

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

October 13, 2009

Via Facsimile and U.S. Mail

Mr. Kevin J. Cousins  
Chief Financial Officer  
SenoRx, Inc.  
3 Morgan  
Irvine, California 92618

**Re: SenoRx, Inc.**  
**Form 10-K for the Year Ended December 31, 2008**  
**Filed March 16, 2009**  
**File No. 001-33382**

Dear Mr. Cousins:

We have completed our review of your Form 10-K for the fiscal year ended December 31, 2008 and related filings and do not, at this time, have any further comments.

Please contact Joe McCann at (202) 551-6262 or me at (202) 551-3625 with any questions.

Sincerely,

Mary Beth Breslin  
Senior Attorney