



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

April 13, 2017

Via E-mail

Timothy T. Goodnow
Chief Executive Officer
Senseonics Holdings, Inc.
20451 Seneca Meadows Parkway
Germantown, MD 20876-7005

**Re: Senseonics Holdings, Inc.
Registration Statement on Form S-3
Filed April 3, 2017
File No. 333-217122**

Dear Mr. Goodnow:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Heather Percival at (202) 551-3498 with any questions.

Sincerely,

/s/ Heather Percival for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Mark Ballantyne
Cooley LLP