

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

August 24, 2020

Nick Tressler Chief Financial Officer Senseonics Holdings, Inc. 20451 Seneca Meadows Parkway Germantown, Maryland 20876-7005

> Re: Senseonics Holdings, Inc. PRE14A filed August 19, 2020 File No. 001-37717

Dear Mr. Tressler:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

PRE14A filed August 19, 2020

Proposal No. 2, page 10

1. Please expand your disclosure to discuss the potential anti-takeover effect of the increase in the number of authorized shares that would be available as a result of the approval of Proposal 2.

Reasons for the Increase in Authorized Shares and Risks to Stockholders of Not Approving this Proposal No. 2, page 11

2. We note the disclosure on page 11 regarding your reasons for the increase in authorized shares, namely the desire of your Board of Directors to have additional shares available to provide flexibility to use your capital stock for business and financial purposes in the future and to be able to act quickly if market conditions are favorable. Please revise your disclosure to clearly state whether you have any current plans, arrangements or understandings, whether written or oral, relating to the issuance of the additional authorized shares of common stock that will become available as a result of the proposed

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amendment, or if none, so state.

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 Laura Crotty at (202) 551-7614 or Celeste Murphy at (202) 551-3257 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Mark Ballantyne