Reviewer's report

Title: Development of a polymerase chain reaction assay for the rapid detection of the oral pathogenic bacterium, Selenomonas noxia

Version: 2 Date: 5 May 2015

Reviewer: Marlise Klein

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The manuscript describes the development of a quantitative PCR assay to detect S. noxia. The topic is of interest. Overall, the manuscript is well written, but there as a couple of points for review to improve readability, as follow:

1. Please consider replacing the “Real Time PCR” by “quantitative PCR (qPCR)” throughout the text, as recommended by the MIQE guidelines (Bustin et al., 2009).

2. Page 5, DNA extraction: please replace “Bacterial DNA” with “microbial DNA” because C. albicans is not a bacterium. Also, please double check the temperature at which the DNA samples were stored.

3. Page 7, … PCR optimization: what was the DNA concentration used as template to test primers and probe?

4. Page 9, PCR optimization: Please comment on the primer concentration of 0.9 micromolar for both forward and reverse primers – this concentration appears to be somewhat high.

5. Page 9 and 10, DNA concentration: The data presented in table 6 is the yield of DNA recovered from the DNA isolation procedure. Were the DNA samples diluted to a specific concentration to serve as template for qPCR reactions?

6. Page 10, PCR inhibition: What is the possible source of PCR inhibitors? If the DNA samples were not diluted prior to qPCR reaction, could be that the high concentration of DNA templates were inhibiting the reactions.