Reviewer's report

Title: Periodontal disease, chronic kidney disease and mortality: Results from the Third National Health and Nutrition Examination Survey

Version: 2 Date: 22 March 2015

Reviewer: Vanessa Grubbs

Reviewer's report:

The authors used NHANES III data linked with mortality data to examine the association of periodontal disease and/or CKD with cardiovascular death and all-cause mortality. This manuscript is well-written, important, and interesting.

Major Compulsory Revisions:
none

Minor Essentials Revisions
1. How was cardiovascular mortality defined—what diagnoses were included?
2. In Discussion, authors assert that only small Japanese study examined association between periodontal disease and renal outcomes. This is not true. Shultis and colleagues did (Diabetes Care 2007); this work should be cited.
3. Suggest adding a line to page 10 in Discussion. Yes, not having interval dental treatment data is a limitation, but would expect this to bias findings towards the null.

Discretionary Revisions
1. It unclear why "dental care use" is included as a covariate. It seems lack of dental care may have a lot to do with getting periodontal disease, but would be highly correlated with periodontal disease.
2. Similarly, it seems inflammatory markers would be on the causal pathway between periodontal disease and mortality, so should not be adjusted for.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I have received investigator-initiated research funding from Valeant Pharmaceuticals.