Reviewer's report

Title: Ocular fundus pathology and chronic kidney disease in a Chinese population

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Reviewer: Charumathi Sabanayagam

Reviewer's report:

In this study, Zhu et al. examined the association between ocular fundus pathology and CKD in a large screening population in China. The findings confirm the previously reported association between ocular fundus pathology and CKD in other populations. I have some comments about the manuscript. The authors should number the pages.

Major compulsory revisions:

1. The authors defined CKD as a composite measure of eGFR<60 and/or proteinuria. However, analysis related to this composite measure is not presented anywhere in the manuscript. I suggest the authors present the results of this measure separately in addition to stratification by the 2 indicators.

2. Methods, Evaluation of ocular fundus pathology: Retinopathy assessment could be explained further. How retinopathy was defined and was severity of retinopathy assessed? What was the intra or interrater reliability of retinopathy assessment?

3. Results: Is there any association between AMD or glaucoma suspect and CKD?

4. A separate Table showing analysis of eGFR, proteinuria and the combined CKD would be helpful. This can include additional columns showing number of persons and cases under each exposure category, and a simple model unadjusted or adjusted for basic confounders including age, sex before the multivariable model.

5. In Table 1, those with retinopathy have been compared to those without any ocular fundus pathology. Ideally, they should be compared to those without retinopathy.

Minor essential revisions:

6. Introduction: “A recent study indicated ---- among those patients”. Please mention the population in which this study was conducted.

7. Discussion, paragraph 2: “In our analysis ….. consistent with previous reports”. Please provide references supporting this statement.
8. Table 1 and 2: Please provide the full forms of abbreviations in the footnotes.

Discretionary revisions:

9. Discussion: “the prevalence of blindness and low vision in the united states is projected to increase,…”. How is it relevant in the context of the present study?

10. Methods, Statistical analysis: Since duration of diabetes is an established risk factor for retinopathy, this could be included in the multivariable model if this information is available.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

I declare that I have no competing interests.