Author’s response to reviews

Title: Association between Asymptomatic Hyperuricemia and New-onset Chronic Kidney Disease in Japanese Male Workers: A Long-term Retrospective Cohort Study

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Reply for Reviewers' report

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We thank the reviewers for their contributive comments. These allow us to improve our manuscript.

Reviewer 1
1) Unfortunately, the correlation analysis between the numeric variables UA and GFR, also at later timepoints, were negative: no correlation could be found. These findings are really unexpected, and shed some doubts on the interpretation of the data. Not being an expert in statistics, it seems that by employing dichotomous variables (UA below or above 7, GFR below of above 60), association can be found, but not when the continuous variables are used. As biology is generally continuous and not dichotomous, I would consider the argument based on the continuous variable the by far stronger one, indicating that UA is not associated with later GFR decline, hence is not a predictor of CKD.

Response: Thank you for your comment. We seem to have misunderstood Reviewer 1’s previous comment and replied that the results for a correlation between the continuous UA values and changes in GFR were negative. We received your comment about the correlation between the continuous UA values and the continuous GFR values. It is also consistent with our study, and we will present the results of the analysis. We observed correlations consistent with the results of this study between the UA values when follow-up was started, which were used in the survival analysis in this study, and the continuous GFR values at the start of follow-up, after follow-up for 5 years, and after follow-up for 10 years (correlation coefficient: at the start of follow up, -0.21, p<0.001; after 5 years, -0.20, p<0.001; after10 years, -0.22, p<0.001). In this study we used a survival analysis to assess whether there was a new-onset CKD; however, we have added an additional statement to the text in regard to the correlation between the continuous UA values and the continuous GFR values. The sentence below has been added to the Discussion section.
In addition, significant negative correlations were found between the uric acid values at the start of follow-up and the GFR values at the start of follow-up, after follow-up for 5 years, and after follow-up for 10 years (correlation coefficient: at the start of follow-up, -0.21 p<0.001; after 5 years, -0.20 p<0.001; and after 10 years:-0.22 p<0.001) (data not shown).