Reviewer’s report

Title: Mitochondrial DNA 5178 C/A polymorphism modulates the effects of alcohol consumption on estimated glomerular filtration rate in middle-aged Japanese men

Version: 1 Date: 14 May 2012

Reviewer: Rieko Okada

Reviewer’s report:

The authors showed the gene-environmental interaction on kidney damage, which is an important theme. The manuscript is well written. Although there are some interests in this study, I have some concerns I would like to add:

[Major Compulsory Revisions]

Methods
1) Please show the range of age of study subjects. If the authors want to say “in middle-aged” in the title, the authors should define the range of age eligible in the study or they should show there is no elderly subjects contained.

2) Please comment why the subjects with diabetes were excluded, and the exclusion criteria of diabetes.

3) Please comment that there were no outliers in eGFR as the authors compare the means of eGFR between the groups.

4) Please describe how the covariates were selected in the multivariable analysis.

Discussion
5) As most of the study subjects (almost 80%) show their eGFR less than 90 ml/min/1.73m2, I wonder if the authors can define eGFR<90 ml/min/1.73m2 as having decreased eGFR in this study. Please comment on this in a discussion section.

Table 1
6) Are there any data on lipid-lowering medication use? If so, please add this variable in Table 1.

Table 3
7) Please show the number of each group, and the number and the percentage of decreased eGFR of each group.

[Discretionary Revisions]
8) It is hard to compare the results of Table2 and Table 3, because the column
and the row of Table 3 is opposite from that of Table 2. How about showing the results in the same way? If the authors think this way is better, it is OK.

**Level of interest:** An article of importance 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 declare that I have no competing interests.