Reviewer’s report

Title: The hOGG1 Ser326Cys Polymorphism and Prostate Cancer Risk: A Meta-Analysis of 2524 cases and 3234 controls

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Reviewer: Sevtap Savas

Reviewer’s report:

Reviewer comments:
Zhang et al. describes a meta analysis on the OGG1- Ser326Cys polymorphism and its association with susceptibility to prostate cancer. The manuscript is succinct, generally written well, both the title and the abstract convey the work undertaken by the authors and the major findings of the study.

Major Compulsory Revisions:
1. This reviewer is not very familiar with some of the statistical tests performed in the manuscript. Assuming that not all of the readers would also be familiar with them, the manuscript would benefit from briefly describing some of the tests. For example, why the heterogeneity test was used? What does it mean to have heterogeneity between studies? For example, for the Caucasian populations, “...there was a significant between-study heterogeneity in all the comparisons...”. How does this affect the authors’ analysis and conclusions?
2. Pages 6-7: This section may benefit from a clear indication of populations examined when presenting the statistical results. For example, the first part of the Results, is it for the entire 2524 cases and 3234 controls? Similarly, the second part of the Results where additive, recessive, dominant, and Cys vs Ser comparisons are mentioned, we need to look at the Figures to understand that these results are for the mixed populations; can the population information be added to the text as well? Also, the last paragraph of the results is not clear. For example, the sentence with“ except for the dominant model comparison........” Please make sure that the readers understand that the authors do not show this data in Figures (for example, add at the end of the sentence (data not shown). In “Cys versus Ser (OR: 0.88.......”, please specify that it is the Cys allele versus Ser allele comparisons.
3. Page 9 and 10: this reviewer would prefer statements such as “statistically significant (or insignificant) increase or decrease in Pca risk”, rather than “trend”, which may confuse some readers.
4. Page 9: How can we explain that significant decrease in Pca risk for mixed populations? Is it because of the large sample size in this group, for example?

Minor Essential Revisions:
5. Page 3. Define PCa before using the abbreviation.
6. OGG1-Ser326Cys polymorphism is referred as a functional polymorphism in the manuscript; can the authors add information on the functional consequences of this polymorphism?

7. Page 4. The first sentence of Methods; “…..cancer” or in Medline……”. Is the “or” extra here or is there a word after which was omitted in the text?

8. Page 6: Can the heading “Meta-analyses Databases” be changed for something more reflective of the contents of this section?

9. Page 6: “The Cys/Cys genotype carriers did have an increased prostate cancer risk….”. The p-value is not significant at 0.05 level, thus the above statement may confuse some readers. The authors may rather state that there was no statistically significant difference in Pca risk between the patients with these two genotypes.


11. Page 5: “Then the relationship between allele and susceptibility to Pca was examined”. In this sentence, the authors would like to specify it is the comparison of Cys allele with Ser allele. This will help understanding the results on Page 7.

12. Page 5: Data extraction section: please add the statistical data to the extracted data.

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests