Reviewer’s report

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

**Version:** 4  **Date:** 21 August 2011

**Reviewer:** Helene Choquet

**Reviewer’s report:**

In this report, H. Zhang and colleagues assessed the association between the Ser326Cys (rs1052133) polymorphism of human 8-oxoguanine DNA glycosylase (hOGG1) gene and the risk of prostate cancer by combining 8 independent studies in a meta-analysis including 2524 cases and 3234 controls. This current study do not include new data, however this meta-analysis is relevant. The paper is globally clear but the discussion subsection might be improved.

Minor points:

1. The Authors should specify at least one time the official rs number corresponding to the Ser326Cys Polymorphism (= rs1052133).

2. The Authors should detail the abbreviation “PCa” at the beginning of the Background section and then replace “Prostate cancer” by “PCa” in the rest of the text. This abbreviation should be also added in the List of abbreviations.

3. In the Background subsection, following the sentence “In the past years, the hOGG1 Ser326Cys polymorphism has attracted widespread attention”, the authors should specify that this polymorphism is functional.

4. In the Results subsection, the sentence “In the stratified analysis by ethnicity, no significant heterogeneity was detected we detected in all the comparisons in mixed population” is not clear. This sentence should be reformulated.

5. In the Results subsection, the Authors should specify that results in the sentence “There was significant association ... except for the dominant model comparison” correspond to the Mixed population.

6. The “Begg’s funnel plot and Egger’s test” should be added in Statistical Analysis, methods subsection.

7. The authors might specify the name of the model “Cys vs Ser”. Allelic model ?

8. In my view, the two first paragraphs of the Discussion subsection (from “Several DNA repair pathways ...” to “... to explore a robust estimate of the effect of this polymorphism on prostate risk”) are most background (and not discussion). The authors should simplify and reformulate the beginning of the discussion part.
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.