Reviewer's report

Title: the effect of tobacco, XPC, XPD and XPG genetic variants in bladder cancer development

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Reviewer: Hemant Bid

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This is an interesting study, particularly with reference to the relationship between these risk factors, the stage and the grade of bladder tumors. This study was designed to see the effect of tobacco and three genetic polymorphisms in XPC, XPD and XPG genes (rs2228001, rs13181 and rs17655) in bladder cancer development in Tunisia. I have a number of comments, which need to be addressed, before even considering this paper for publication.

Major comments:

1. Bladder Cancer is a very prevalent disease and there would be no problem in getting the more samples. This type of polymorphic studies needs a large no of sample size but the sample size in this study is very small for getting any conclusive results.
2. In Material & Methods: Is there any previous clearance from the ethical committee of Hospital?
3. In the results, Haplotype analysis and Linkage disequilibrium should be incorporated for more meaningful conclusion. Carriage rate should also be calculated and compared between both the groups.
4. Potential design flaws that could make even modest findings suspect. The greatest problem with this study is the lack of detail provided about how it was designed (sample size calculation) and the findings are not discussed properly.
5. Exclusion and inclusion criteria for the selection of both the groups are not properly discussed in Method section.
6. Discussion is not well written. Results should be discussed with other recent findings associated with bladder cancer.

Minor comments:

1. In the introduction first and second paragraph, is reference less.
2. Fig is not reproducible
3. In Table 5, Page 21 Sexe should replaced by Sex. The same correction for Table 4 also.
5. Methods, page 2: What "demographic information" was collected and how?
6. Statistical Analysis, page 18: Please explain binary logistic regression. Was this technique used to determine odds ratios?

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**Level of interest:** An article of importance in its field

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests