Reviewer's report

Title: Associations of Prostate Cancer Risk with the RNASEL R462Q Polymorphism and Viral Infection.

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Reviewer: Oleg Alexeyev

Reviewer's report:

In this reviewer opinion the manuscript title is ambiguous and gives impression that there is association between RNASEL R462Q polymorphism and viral Infection and prostate cancer. In fact the only association to have been demonstrated is for HPV and PC.

Abstract
1. The second sentence in the background section is more suitable for introduction. 2. The abstract lacks consistency in presentation. For example, genotyping of the R462Q alleles is mentioned in the methods section but not in the results and conclusions.
3. The last sentence in the conclusion section is used to indicate the major finding of the paper. Is it so for the current paper?

Methods
4. Selection criteria for TRP are vague. The authors should elaborate on how many patients fulfilled each of the stated criteria: abnormal DRE, TURP. Which TURP findings were used as a criterion for TRP?
5. It is not clear how case patients were matched with control patients? Definitely not by age, as can be seen from the fig 1.
6. Description of equipment for PSA determination, ultrasound investigation as well as the regime of antibiotic prophylaxis/enema is not pertinent to the scope of the paper and can be omitted.

Results
7. The section on clinical characteristics of the patients would suit Material and Methods.
8. The figures 1 and 2 to a large extent duplicate the text and can be omitted. The same for figure 2.

R462Q genotyping
9. Units for measuring frequencies of genotypes should be clearly stated.

Viral sequence detection
10. The sentence “The presence of HPV sequences was detected in 15 subjects (11.5%) of which 11 (20.0%) of them were cases and 4 (5.33%) controls” should be re-written. From the mathematical view point it should be 11 (73%)...and 4
(27%).

Discussion

11. The authors have utilized 2 biopsy cores for virus detection (page 5). This is a major limitation of the study which may explain low viral detection. The point should be addressed.

12. A disproportionally large space is devoted to XMRV, given the single positive sample in the control cohort.

13. “Absence of HCMV, polyomaviruses, and XMRV in tumor prostate tissue suggests that they are not associated with PC in Mexican population” page 12 is clearly an overstatement, given the size of the case cohort.

Level of interest: An article of limited interest

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

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