Reviewer's report

Title: HNF1B polymorphism in endometrial cancer patients: effects on overall survival

Version: 2 Date: 6 September 2014

Reviewer: Francisco Candido dos Reis

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General Comment
The authors reported overall survival for 191 women with endometrial cancer according to various prognostic factors. However, based on presented data, the significance of rs4430796 SNP is difficult of being interpreted. The main conclusion is based on survival data of 30 women who received treatment based on chemotherapy and radiotherapy and this result is probably biased by an unlikely 5-years survival of 90% in the GA+AA chemo-radiotherapy group.

Major Compulsory Revisions
1. The introduction is generic. The authors should present a clear justification for the importance of investigating rs4430796 as prognostic factor in endometrial cancer.
2. The survival analysis was based only in OS. The results would be more meaningful if progression free survival was also evaluated.
3. The purpose of the Cox proportional hazards model is to simultaneously explore the effects of several variables on survival time; therefore “univariate” Cox model is not informative. On the other hand, the “multivariate” model should include known prognostic factors like age, grade, and performance status.
4. Cox proportional hazards model can deal with binary, grouped or continuous covariates. The covariates stage and adjuvant treatment should not be used as binary in the model.
5. There were 8/57 stage III-IV in GG genotype group and 19/134 in the GA+AA group. According to the Figure 2 more than 90% of stage III-IV EC in the GA+AA group (chemoradiotherapy group) are alive at 5 years of follow up. It looks similar to early stage tumors. This result is not compatible with the current literature, expected 5-years survival for this group would be around 50%. These cases should be reviewed.
6. The authors should write a paragraph containing the meanings of their results in the discussion.
7. The clinical implications of the results should be better explained.

Minor Essential Revisions
1. In the line 105 “experimental study” should be “observational study”.
2. Table 1: the proportions should be reported by group.
3. Figures 1 and 2: should include the corresponding at risk tables.

Discretionary Revisions
1. The sentence “Parametric data were expressed as median and range” does not make sense.
2. The sentence “Significant statements referred P values of two-tailed tests that were less than 0.05.” should be deleted.
3. The authors state “In all EC patients a complete resection of the disease was obtained.” Was it possible for stage IV tumors?
4. The sentence “Based on present findings, we estimate a post-study sample size of about 500 patients…” should not be in the discussion.

Level of interest: An article of limited interest

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.