Title: Preoperative serum 8-hydroxydeoxyguanosine is associated with chemoresistance and is a powerful prognostic factor in endometrioid-type epithelial ovarian cancer

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Author's response to reviews: see over
Dear Editor-in-Chief,

We thank you for your interest in our manuscript “Preoperative serum 8-hydroxydeoxyguanosine is associated with chemoresistance and is a powerful prognostic factor in endometrioid-type epithelial ovarian cancer”.

We would also like to thank Reviewers for their highly constructive and useful comments. We have incorporated the requested changes and additions to the manuscript as described below. We have also used a professional language editing service to improve the style of written English as suggested. Hopefully the manuscript now fulfills your requirements and is ready to be published in BMC Cancer.

We would be pleased to answer any questions related to this manuscript.

Sincerely,

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Reviewer’s comment: It has been reported in your previous study that high 8-OHdG levels both in the serum and in the tumor tissue was associated with traditional factors of poor prognosis and serous histology in epithelial ovarian cancer (Figure 1), in which study the authors used 84 patients with ovarian cancer, diagnosed and treated from 1997-2005 at the Gynaecological Oncology Unit, Oulu University Hospital (Anticancer Res. 2011 Apr;31(4):1411-5.). The present study involved 112 epithelial ovarian cancer patients diagnosed and treated at Oulu University Hospital in 1996–2009. In most cases, the patients were operated upon in Oulu University Hospital. I think the 85 ovarian cancer patients in the first study were all included in the 112 patient of the present study. The main results of the present study also showed serum 8-OHdG levels were significantly associated with poor DFS. I do not think these results add different findings with the previous study and re-using of the data was not suitable for further publication.

Reply: We thank Reviewer for this valuable comment, however, it requires some clarifications. In our previous study (Pylväs et al. Anticancer Res 2011) the patients had mainly serous ovarian cancer (n=63), although there was also 11 endometrioid, 7 mucinous, 2 clear cell and one patient with other histological subtypes. 8-OHdG associated with serous histology, but material was too limited to assess the prognostic value in different histological subtypes.

Based on the hypothesis from the above mentioned study, the aim of this present study was to evaluate 8-OHdG and DJ-1 expressions in different ovarian cancer histological subtypes. The current literature suggests that there are significant differences in the pathogenesis and clinical course between ovarian cancer histological subtypes (Prat J. Virchows Arch 2012;460:237-49, McCluggage Pathology 2011;43:420-32). We included 35 patients from our previous study to the present study (32 serous, 2 endometrioid and 1 clear cell histology) simply to make possible to assess the current hypothesis. Thus, in the present study there were 77 new patients and we have not re-used the majority of the patients from the previous study as the Reviewer suggested.