Reviewer's report

Title: Influence of Mucin-1 on grading, staging and overall survival evaluated in sera and tissue of ovarian cancer patients

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Reviewer: Malka Cohen-Armon

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Mucin-1 and its relation to grade, stage and survival in ovarian cancer patients

In general this is a report about the possibility to use mucin-1 antibody for evaluating by immunostaining prognosis in ovarian cancer.

If BMC Cancer publishes such reports, than the manuscript is acceptable after some puzzling statistical data are corrected. In example:

"Mucin-1 levels are significantly different in benign and malign diseases of the ovary, but show high variability" - If so, why is the p value 0.0

"Results from immunohistochemistry indicate a prognostic relevance of Mucin-1 in ovarian cancer when evaluating the expression by VU-4-H5 antibody"-

So, the other mucin-1 antibody VU-3-C6 is not suitable, the reason for this difference was discussed. Other antibodies should be tested for identifying the most efficient antibody for diagnostics.

"worse outcome for patients with high expression of MUC1 in ovarian cancer"- Howeve "No significant differences in terms of time to relapse and overall survival were found in patients treated with a Yttrium-labeled monoclonal antibody recognizing an extracellular portion of MUC1[26]" Could you please comment this in the discussion?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'