**Reviewer’s report**

**Title:** Predictive Value of Serum Biological Markers in Patients with Gastric Cancer

**Version:** 1  **Date:** 26 January 2013

**Reviewer:** Masakazu Yashiro

**Reviewer’s report:**

**Major Compulsory Revisions**

The study by Wu and colleagues investigates the expression of two chemokine ligands (CCL2, CCL18) and vascular endothelial growth factor (VEGF) in peripheral blood of patients with gastric cancer. The preoperative serum levels of CCL2, CCL18 and VEGF were significantly higher than that of controls. The prediction rate of presence of gastric cancer utilizing both VEGF and CCL2 revealed high sensitivity and specificity. Correlation of these markers with clinicopathological factors was also examined. Preoperative serum levels of VEGF and CCL2 may be useful for predicting the presence and progression of gastric cancer in its early stage.

The findings presented in this study are interesting and look convincing. However, it does not achieve a high enough priority for publication at this time in the view point of novelty. Although they claim that this is the first paper reporting roles of CCL2, CCL18, and VEGF in progression of gastric cancer, it has already demonstrated that CCL and/or VEGF were hallmarks of gastric cancer development (Yoshie O et al. Cancer Res. 2006 Feb 15;66(4):2181-7; Xing YN et al. Hum Pathol. 2012 Dec;43(12):2299-307; Kakeji Y et al. Surgery. 2002 Jan;131(1 Suppl):S48-54.). Moreover, serum levels of these chemokines and growth factor has been already examined in several malignant tumors, even if the cells are not gastric cancer as the authors describes in this manuscript (Zohny SF, et al. Med Oncol 2010;27(4):1246-1253). Thus, this paper shows similar results as already demonstrated data. Certainly, they showed combined CCL2 & VEGF had superior sensitivity and specificity of prediction, but it looks like that organ specificity is lacking. I can't identify the diagnosis of patient who shows high level of serum CCL2 and VEGF as gastric cancer, because other types of organ, such as ovary and colon should be good candidates as described previously. Thus, the authors surly need to show the data demonstrating the specificity of CCL2 and VEGF to predict the presence of gastric cancer or discuss about it. It might be useful to combine the existing specific markers for gastric cancer in addition to their results.

**Minor comments:**

**Materials and Methods**

Page 5, line 17: -80 °C is typed incorrectly.
The authors claim the serum levels of chemokine ligands and VEGF was significantly related with clinicopathological factors, but don't show the data. This is an important point in the manuscript and it would be highly preferable to show the data as tables.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**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.'