Reviewer's report

Title: Clinical significances of preoperative serum interleukin-6 and C-reactive protein level in operable gastric cancer

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Reviewer: Ming-Shiang Wu

Reviewer's report:

In this study, the authors analyzed the prognostic significance of preoperative IL-6 and CRP levels in gastric carcinoma. While the significance of CRP in gastric cancer has not been reported, several studies on IL-6 have already been published. Several points need clarification as in the following comments.

1. ANOVA was used to compare IL-6 and CRP levels among various stages or strata of clinical characteristics, which requires the variable analyzed to follow a normal distribution. However, the distribution of IL-6 and CRP was clearly not normal as presented in table 2. Therefore, either transformation of IL-6/CRP level into normal distribution or resorting to a nonparametric method should be considered.

2. The authors divided the patients into two groups on the basis of an IL-6/CRP cutoff value as determined by ROC curve. It is not easy to understand how the ROC curve was constructed. What was the outcome in this ROC analysis? What method was used to choose a cutoff from ROC curve should be clearly explained, and a sensitivity analysis may be preferred to justify the cutoff value.

3. IL-6 was proposed as a prognostic predictor in this study. Given IL-6 correlates with disease extent, no wonder it will correlate with prognosis. A multivariate analysis to evaluate whether IL-6 or CRP is an independent prognostic factor with adjustment for other factors should be considered.

4. Follow up of the patients and the definition of time to progression and survival should be explained in more detail.

5. The results of IL-6 were similar to a recent report from Clin Cancer Res 2008:14:428-34, which deserved consideration for reference and discussion.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.