Reviewer's report

Title: AB0 blood group and prognosis in patients with pancreatic cancer

Version: 2 Date: 11 April 2012

Reviewer: Keitaro Matsuo

Reviewer's report:

Rahbari et al. conducted a case-control study to evaluate an association between ABO blood group and prognosis in patients with pancreatic cancer in Germany. They found significant impact of blood group O on survival after surgery. Although the question of interest is interesting; however, several point must be considered in the future versions.

1) Considering the nature of the study as a cohort of pancreatic cancer patients receiving surgery evaluating survival, the analysis comparing patients cohort and other population about ABO blood group distribution looks strange. Again it is unusual to see sudden appearance of non-pancreatic cancer cohort in the first paragraph of result section. The analysis seems as if authors are trying to refer impacts of ABO blood group on pancreas carcinogenesis and it is definitely not the main focus of the study. To make the study and the paper reasonable, this reviewer recommend removing this part from the manuscript. (Major Compulsory Revisions)

2) 

a) In the multivariate survival analysis, authors excluded 44 patients with missing value from analysis. Using complete data analysis used to induce bias in the results. Basically, authors used categorical variables for all covariate, it is interesting to see the analysis using dummy variable for missing categories. Or, authors can try multiple imputation for missing variables. (Major Compulsory Revisions)

b) Although univariate analysis showed resection margin as a significant factor, it is not considered in the multivariate analysis. Add it in the multivariate analysis or clarify the reason in the text. (Major Compulsory Revisions)

c) In the multivariate analysis, authors applied dichotomy of ABO blood groups (O vs A/B/AB). Considering results in the table 2, compared to A, other blood groups showing lower likelihood of having event. It is of interest to see the results presenting HRs for O, B, AB relative to A in the multivariate analysis. Even if authors keeps the style, it should be clarified why authors applied this dichotomy criteria in their analysis. (Major Compulsory Revisions)

Minor point:

Authors should use ABO rather than AB0(AB zero). Same is true 'blood group 0' instead 'blood group O'. (Minor Essential Revision)
**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I don't have in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this paper, either now or in the future.

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I don't have any other financial competing interests.

I don't have any non-financial competing interests in relation to this paper.

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.