Reviewer's report

Title: Moderate and heavy alcohol consumption is associated with less inflammation and better health-related quality of life in female rheumatoid arthritis patients in Sweden. Data from BARFOT, a multicenter study on early RA.

Version: 1 Date: 11 February 2013

Reviewer: Bing Lu

Reviewer's report:

This is an interesting study. I have several major concerns:

1. The study design of this study is cross-sectional. However, the association between alcohol and RA activity could not be investigated based on this design. Reverse causation and recall bias would be major issues. Disease activity will affect alcohol use. The medications for RA symptoms may interact with alcohol.

2. Another major issue is about statistical method. The current primary analyses were stratified analyses by each important factor. That would be not enough to adjust for confounding factors. The primary analysis should be multivariable models. The results should be presented as a major table.

3. Why was the primary outcome analyzed using a binary variable, why not use a continuous variable, either in original scale or transformed scale?

4. The study sample is a sub-set of the study, selection bias would be a potential problem. Please discuss in manuscript.

5. Table 1 and 2 should be merged into one table.

6. In manuscript, many places used “positive” association. What does it mean? It is “increased risk” or “protective”?

7. The multivariable model should adjust for baseline disease severity.

8. Multiple testing should be considered in the analysis.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:

I declare that I have no competing interests' below.