Reviewer’s report

Title: Serum Gamma-Glutamyltransferase and Uric Acid Levels are associated with Prediabetes in Adults from Inner Mongolia, China

Version: 1 Date: 21 November 2012

Reviewer: Jialiang Li

Reviewer’s report:

The analysis results are interesting. The effects of GGT on the pre-diabetes outcome seem to be non-linear for male. That is, the OR for Q3 vs Q1 is higher than that for Q2 vs Q1, but also higher than that for Q4 vs Q1. Then you cannot conclude that the effects of GGT become stronger in a linear pattern. Please discuss on this. Similar pattern was observed when studying the association between GGT and peripheral arterial disease. See Shanker et al. / Atherosclerosis 199 (2008) 102-109.

Another suggestion is to show results by treating GGT as continuous variable. For a few GGT-related analysis, some authors also proposed to create an Odds plot to show the nonlinear dependence by using the well-known statistical smoothing technique. See Circulation Journal (2007).71: 1567-1572 and European Journal of Epidemiology (2009). 24(7): 369-373.

Minor comments:
1. Page 6, 4th line in Statistical Analysis, add “F-test” after “analysis”.
2. 5th line, change to “A correlation and linear regression”.
3. 6th line, change to “study the relationship”.
4. 7th line, change “as quartiles” to “according to the distribution quartiles”.
5. 8th line, use lower case for logistic.
6. 9th line, change “comparison” to “effects”.

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

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