Reviewer's report

Title: Geographic Patterns of Hepatocellular Carcinoma Mortality with Exposure to Iron in Groundwater in Taiwanese Population: an Ecological Study

Version: 2 Date: 12 January 2013

Reviewer: How-Ran Guo

Reviewer's report:

The authors have responded to most of my comments. I have only a few remaining issues.

Major Compulsory Revisions

1. The authors stated the major limitation of incidence data was that the reporting is not mandatory and thus less complete. However, if the reporting was not related to the level of iron, this should not affect the correlation coefficients. The incidence data had better correlations with the iron levels, and the correlation coefficients were less affected (in comparison with those for mortality data) by the adjustment of land subsidence. In particular, after adjusting for land subsidence, the correlation coefficient for mortality in women was not significant and very close to the null value (0.128 only). On the other hand, after adjusting for land subsidence, the correlation coefficients for incidence data had less reduction in the absolute values and remained statistically significant. It seems that the incidence data had more stable correlations with the iron levels and thus should be the focus of discussion.

2. The figure showing iron levels in groundwater should be placed in the paper even though there are missing data.

Minor Essential Revisions

Using correlation coefficients as the measurement of association, the conclusions should be even more conservative.

Discretionary Revisions

The authors stated in their reply that “We have changed the P values to include only 3 decimal places in this revised manuscript.” But, that was not true even for the Abstract, let alone the text or tables.

Level of interest: An article of importance in its field

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.