Reviewer’s report

Title: Association between bilirubin and cardiovascular disease risk factors: Using Mendelian randomization to assess causal inference

Version: 3 Date: 31 January 2012

Reviewer: So-Youn Shin

Reviewer’s report:

Discretionary Revisions
The authors answered my questions about the dominant model and the degree of relatedness. Also they modified the conclusion to address the third assumption of Mendelian Randomization as suggested.

Minor Essential Revisions
None

Major Compulsory Revision
Even though the authors claimed that “there is no consensus in the literature on the most valid way to account for testing more than one trait”, I believe it is worth to add a sentence at the end of the Statistical Methods such as “No adjustment was made for multiple testing because ….”.

Regarding the validation issue, I understand it was difficult for them to find a replication study.

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 declare that I have no competing interests.