Reviewer’s report

Title: Dental amalgam and urinary mercury concentrations: a descriptive study

Version: 2 Date: 5 December 2012

Reviewer: Gianpaolo Guzzi

Reviewer’s report:

I have reviewed the manuscript “Dental amalgam and urinary mercury concentrations: a descriptive study” by Alexandra Nicolae et al. submitted to ‘BMC Oral Health’ and I do not recommend publication.

Unfortunately, in my opinion, this is a poor paper and, therefore, I recommend rejection.

I disagree with the authors’ interpretation that mercury exposure from mercury tooth fillings can be measured by urine. In fact, it is well-known that urinary mercury is a rough indicator of mercury released from mercury-containing dental amalgam fillings. Monitoring urine levels of total mercury in individuals who carry mercury dental amalgam is a poor biological indicator of the real long-term body burden of mercury amalgam. This fundamentally flaws the results and make the conclusions “The risks associated with the use of dental amalgam appear to be limited, and the benefits to patients are known to be large.” untenable.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.