Reviewer's report

**Title:** Population Attributable Fraction of Smoking and Metabolic Syndrome on Cardiovascular Disease Mortality in Japan: a 15-Year Follow Up of NIPPON DATA90.

**Version:** 1  **Date:** 21 February 2010

**Reviewer:** Simon Capewell

**Reviewer's report:**

Examining CVD deaths in an important Japanese cohort, The authors quantify the contributions from smoking [large] and metabolic syndrome MS[ small]

OK. But the definitions of MS used are arbitrary, over-inclusive and do not agree with standard international definitions.

It might be more useful and informative if they exploited the uniqueness of this cohort, and did a more conventional multiple linear regression analysis, making use of the continuous variables. That would tease out the relative contributions from the "major" risk factors such as cholesterol, systolic BP etc.

By all means, they could add a table later in the paper, forcing their data into the [rather artificial] metabolic syndrome categories.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.