Reviewer's report

Title: 5-year survival and hospitalization due to stroke recurrence among patients with hemorrhagic or ischemic strokes in Singapore

Version: 2 Date: 12 June 2013

Reviewer: Francesco Orzi

Reviewer's report:

It is a retrospective study, based on hospital administrative databases. This methodological aspect is properly addressed (in the discussion section) as a major limit of the study. In the discussion the authors mention that "...the coding of primary diagnoses could be as accurate as 96%". Such a high level of accuracy would certainly strengthen the confidence in the results. It would, therefore, be mostly appreciated to have details about the source of evidence for such a statement.

A further reason of concern regards the criteria used for the selection of the hospitals that participated the study. In the methods section it is stated that "three tertiary public hospitals" were selected. In the discussion it is stated that the study was carried out "... across multi-hospitals". In spite of this apparent incongruence (which is probably irrelevant and merely linguistic) it would be relevant to discuss the hypothesis of a bias selection. Why just those hospital were selected? Is there a chance that patients were able to choose the hospital? If so, does the choice reflect quality or reputation of the hospital itself? Is the choice (if any) of a given hospital based on the burden of the symptoms, so to cause a patient selection bias? An additional question concerns the selected time period (2000-2004). Considering the 5 year follow up, the study was expected to be completed in 2009. Why the data are being reported in 2013?

As a minor, formal issue, the word "race" may well be substituted with "ethnic" or "cultural background", and "racial" with "ethnical" or "cultural".

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

Quality of written English: Acceptable

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