Reviewer's report

Title: Final 2 year results of the Vascular Imaging of acute Stroke for Identifying predictors of clinical Outcome and recurrent ischemic eveNts (VISION) study.

Version: 2 Date: 1 December 2010

Reviewer: Craig Anderson

Reviewer's report:

The authors have updated their manuscript reporting the separate predictors of neurological deterioration, recurrent stroke, and death, among patients with stroke or TIA presenting early after onset to a single large tertiary referral centre in Canada. However, they have not adequately addressed the comments raised by reviewers and indicate some inflexibility in accommodating some analytical adjustments to provide reassurance around the robustness of the results. Despite the wide confidence intervals associated with the point estimates in the models, and their comments that their results are "hypothesis generating", they provide firm recommendations regarding use of these data in clinical decision making in sections of the Discussion.

My main concerns continue to be associated with limited statistical power for the binary endpoints, making the predictor models quite unstable and there is likely to be limited precision around the predictor variables. One way around this is to limit the number of variable, increase the number of endpoints and use continuous measures. Despite recommending use of the NIHSS as a continuous measure, for example, this has been declined by the authors and they are reluctant to change other aspects of their analysis, stating that these we all determined 'a prior'. Well, that may be so, but one can always add in other analyses as confirmatory.

Minor comments:

1) suggest removing the term 'symptomatic' from 50% moderate carotid stenosis, as it is afterall only an association and intervention is dependent on local clinical practice

2) there should be some account of post-stroke interventions in the models to account for outcome events that occur after the emergency room management.

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.

Declaration of competing interests:
I declare that I have no competing interests