Reviewer’s report

Title: The determinants of stroke phenotypes were different from the predictors (CHADS2 and CHA2DS2-VASc) of stroke in patients with atrial fibrillation: a comprehensive approach

Version: 1 Date: 25 June 2011

Reviewer: Jane Caldwell

Reviewer’s report:

Review on The determinant of stroke phenotypes were different from the predictors (CHADS and CHADS-VASc) of stroke in patients with AF: a comprehensive approach.

The authors attempted to identify the factors which determine the phenotype of stroke rather than those which increase the risk of stroke per se.

Once again the cohort fails to address the independent risk of smoking and sex however this was not the focus of this paper so can be excused.

Major compulsory revisions

From the “statistical analysis” section you outline how variable with univariate analysis p<0.1 were taken onto multivariate analysis. This seems very odd. One would normally only take significant variable forward (i.e. p<0.05) to see if they are still significant in multivariate and thus show independent influence. Why have you chosen non-significant variables? This makes the reader think that none of the variables were significant and thus the multivariate analysis is a waste of time.

In the results you say that the CHADS-VASc details are in the supplementary data, however on the CHADS and not the CHADS-VASc is here. Please submit this information too.

In the discussion you mention about antiplatelets and hint about dual platelet cover as in ACTIVE W study, however you do not give us information in any part of the paper about dual platelets prescription. Were any of your patients on this? What was there phenotype? This omission needs to be addressed.

Again in the discussion you write that your data showed that appropriate anticoagulation could reduce ischaemic stroke. How? The whole focus of your paper was on those who were non-therapeutic with no information on those with INR>2. You either need to include this data or remove this comment.

Minor essential revisions

The English of the manuscript needs to be improved. It has the feel of a school report rather than a scientific journal with the constant referral to the first person
plural. Ideally papers should be written from a third person standpoint.

There are areas which are in bold font and I’m not quite clear why – the dates covered by your study are important to you but no to your reader. I also don’t see why the precise echo measurements need highlighted. To be honest none of the areas highlighted were of great importance so I would remove this.

Several sentences are started with conjunctions; And, Because. This is not grammatically correct – please amend.

In other places the English just does not read well eg lack of definite articles. Please review the whole article and amend.

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

**Quality of written English:** Needs some language corrections before being published

**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’