Reviewer’s report

Title: The effect of ABCA1 gene polymorphisms on lipid profile and ischaemic stroke risk

Version: 1 Date: 23 October 2006

Reviewer: Richard W James

Reviewer’s report:

General
The study has analysed the association between ABCA1 gene polymorphisms and stroke in a large population of patients and controls. No important association was observed for individual polymorphisms, or for haplotypes. Minor associations were observed with serum lipid levels, but their interpretation may be compromised by acute lipid changes that can be observed following stroke

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. What was the prevalence of lipid lowering therapy in the populations?
2. Were associations with serum lipid levels analysed for patients not on lipid lowering therapy?
3. Were diabetic patients excluded from the study? If not, what percentage was diabetic?
4. Discussion, p6, 4th paragraph: Please specify the context in which ref 38 is cited (i.e., does it refer to lipid levels immediately after stroke).

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)
1. There are some interesting publications supporting a role for ABCA1 in lipid metabolism within the CNS. These could be briefly mentioned as they provide an additional rationale for analysing polymorphisms.
2. A number of important clinical trials (and analyses) of lipid lowering therapy, with data on stroke, has been published since 1997, the year of the reference (ref 1) cited for the lipid-stroke association. A more recent reference may better serve the interest of readers.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

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