Reviewer’s report

Title: Association analysis of a highly polymorphic CAG Repeat in the human potassium channel gene KCNN3 and migraine susceptibility

Version: 2 Date: 2 June 2005

Reviewer: Rainald Moessner

Reviewer’s report:

General

The authors state in the introduction: 'Given that FHM2 maps to C1q23 and KCNN3 localizes nearby at C1q21.3, it may be important to examine the prevalence of the second (highly polymorphic) KCNN3 CAG polymorphism in populations affected and unaffected with migraine'. Moreover, in the conclusions, they state: 'However, other migraine candidate genes near this cytogenetic region on chromosome 1 are currently being tested'. In fact, the gene for FHM2 has been found in 2003 (FHM2 was found to be an alpha subunit of the sodium-potassium pump (DeFusco et al., Nature Genetics 33, 192-196, 2003). Therefore, with the gene for FHM2 known, this rationale for investigating KCNN3 is not valid.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
A study on KCNN3 in migraine appeared in Headache in February 2005 (A highly polymorphic poly-glutamine stretch in the potassium channel KCNN3 in migraine).

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)

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

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interest.