Reviewer's report

Title: HECTD2, a candidate susceptibility gene for Alzheimer's disease on 10q

Version: 1 Date: 18 June 2009

Reviewer: Seppo Helisalmi

Reviewer's report:

HECTD2, a candidate susceptibility gene for Alzheimer's disease on 10q, written by Sarah E. Lloyd et al. This is a genetic association study comparing allele and genotype frequencies between cases and controls using single nucleotide polymorphism on chromosome 10. The manuscript has been written well and it is understandable. Introduction is clear and methodology is easy to follow. Results and conclusion sound good. However, there are some concerns.

Major Compulsory Revisions

Major concern:

1. Authors mentioned that no detailed age information was available for control group which are the samples from ECACC-HRC DNA panels. If there is no age information, in which way authors are able to know whether these study groups (so cases and controls) are age-matched? And if not, it is possible that results from association test can be partly due to age differences.

Minor concerns:

2. Authors should perform power analysis to test a significance of their study material and compare to that with their results.

3. APOE genotyping was done by Cfo 1 restriction...Authors should add reference to this sentence.

Discretionary Revisions

1. Statistics has been described very shortly. Authors mention only that P-value is calculated by a Chi-square test. Is that test Pearson Chi-Square, Likelihood Ratio or which test?

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'