Reviewer’s report

Title: Genes implicated in multiple sclerosis pathogenesis from consilience of genotyping and expression profiles in relapse and remission.

Version: 3 Date: 22 December 2007

Reviewer: Pentti Tienari

Reviewer’s report:

The authors have satisfactorily answered all but one of my concerns.

Minor Essential Revisions

I accept their decision to focus on just one TGFB1 promoter polymorphism, but I still do not accept the idea for typing 620 trios for TGFB1 and only 102 trios for ALOX5. The direct effect of the ALOX5 VNTR appears unlikely (38 transmissions vs. 34 untransmissions in TDT) but marker effect of the VNTR via LD with another variant cannot be judged based on such small material. This VNTR will not be typed in chip-based GWAs, so there will be no replication of this result. I am sure the authors understand that it is not adviceable to published such underpowered results. I hope they would pursue towards higher power and analyse the ALOX5 VNTR in a larger set of trios.

What next?: Accept after minor essential 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, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests