Reviewer’s report

Title: A single nucleotide polymorphism in TRAF1/C5 locus is associated with rheumatoid arthritis in a Han Chinese population

Version: 4 Date: 27 June 2010

Reviewer: Tony Merriman

Reviewer’s report:

The authors have improved their analysis of TRAF1/C5 SNP rs3761847 in RA. However, in addressing one earlier query, namely the direction of association at rs3761847 in their data compared to that in Caucasian, they have opened some important questions. Before suggesting some further work to further investigate the differing direction of association, I do note that identifying the differing direction of association should have been done by the authors in the original submission.

MAJOR

SNP rs3761847 was chosen based on association in one previous GWAS. However, other SNPs in TRAF1/C5 have been associated with RA in other populations, what is the linkage disequilibrium relationship between these and rs3761847? It is likely that the differing direction of association between Chinese and Caucasian could relate to differing frequency of risk haplotype. This would be clarified by typing either some tag SNPs or other associated SNPs. (To do further typing, I suggest using Taqman rather than the more laborious SnapShot).

MINOR

1. Please put clinical data in Table 1.
2. Update RA gene list with new Stahl data (Nature Genetics May).
3. The final paragraph of the Discussion would be better in the Introduction.

Level of interest: An article of importance in its field

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