Reviewer's report

Title: Investigating the Complex Genetic Architecture of Ankle-Brachial Index, a Measure of Peripheral Arterial Disease, in non-Hispanic Whites

Version: 2 Date: 10 March 2008

Reviewer: Andreas Ritsch

Reviewer's report:

Sharon et al. investigated the relationship of 435 SNPs in 112 candidate genes with ABI in 1046 non-hispanic white hypertensive patients from the GENOA study. As stated within the abstract, the main effects are found for two SNPs of the NOS3 gene. Presentation of these data in the Abstract and in section Results suggest that this is a novel finding. However, this association has been described in a recent publication by the same group in the same patients (Kullo et al., Association of polymorphisms in NOS3 with the ankle-brachial index in hypertensive adults, Atherosclerosis 2007), which is exclusively acknowledged within the Discussion. After the reviewers opinion, presentation of 25 SNP-SNP interactions including corresponding statistical data does not warrant publication in BMC Medical Genomics.

What next?: Reject because too small an advance to publish

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.