Reviewer's report

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

Version: 1 Date: 25 January 2008

Reviewer: Andreas Ritsch

Reviewer's report:

Major
1) Selection of SNPs: The title of this article suggests a comprehensive analysis of the genetic background of the clinical parameter ABI (The Genetic Architecture of ABI ...). For this ambitious claim one might expect the inclusion of all genetic variants known to be associated with this parameter. However, this is clearly not the case and it is not clear how the SNPs were selected for this study.
2) Selection of patients: there is an obvious bias in this study, as patients were recruited from a hypertensive study population (GENOA). Data are at least non representative for the total population.
3) The most important results of this paper have been presented in an earlier publication (Kullo et al., Association of polymorphisms in NOS3 with the ankle-brachial index in hypertensive adults, Atherosclerosis 2007)

- Minor
1) Basic clinical parameters:
- Waste to hip ration should be presented in addition to BMI.
- Hba1c values should be presented
- TG and CRP values should not be presented in log values used for statistic analysis.

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: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests