Reviewer's report

Title: Triglyceride altering polymorphisms of the ApoAV gene have very different allele frequencies in India compared to Europeans

Version: 1 Date: 6 July 2006

Reviewer: Geesje Dallinga-Thie

Reviewer's report:

General
This is an interesting study about the occurrence of apoAV gene variations in India in comparison to Europe.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. Since the publication of 3 studies analysing apoAV mass in large human cohorts showing that apoAV concentration is very low and is positively associated with plasma TG and is not a major determinant for plasma TG one can not simply publish genetic variation anymore without taking this into account. In addition, these studies show that the -1131 T>C variant is associated with decreased apoAV levels whereas the S19W is associated with increased plasma apoAV levels. This means that the positive correlation observed in all studies cannot simply be explained through apoAV. This should be extensively addressed in the present paper.

2. The -1131T>C variation harbours a large number of homozygous mutants in the Indian population. This means that in table 3 the three genotypes for this marker should be presented individually.

3. In table 4 a model is created for plasma TG. However important regulators of plasma TG are missing such as plasma HDLc (which is measured) and apoCIII (which is not measured). Table 4 should be recalculated with HDLc into the model.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

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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: No

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