Reviewer's report

Title: Effects of the Diabetes linked TCF7L2 Polymorphism in a Representative Older Population.

Version: 1 Date: 28 September 2006

Reviewer: johannes A maassen

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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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)

The authors have examined the relation between genetic variants in the TCF7L2 gene and parameters of the metabolic syndrome/type 2 diabetes. It was found that carriers of the T allele had a higher tendency to elevated fasting blood glucose levels and higher HDL cholesterol. Based on HOMA calculations it is concluded that the T allele have a tendency to beta cell dysfunction.

Comments:
1- I would like to recall that HOMA derived conclusions on cell beta cell function is a matter of debate.  
2-If insulin secretion is lower in carriers of the T-allele, this may have an effect on BMI. Was this analysed? 
3-Genetic variants also may affect the outcome of drug treatment. I assume that a substantial fraction of the participants had some kind of medication. Was the nature of the medication evenly distributed between the allelic groups?

Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of importance in its field

What next?: Accept for publication in BMC Medicine after discretionary revisions

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

no competing interests