Reviewer's report

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

Version: 1 Date: 9 September 2006

Reviewer: Michael Boehnke

Reviewer's report:

General: This is an interesting, timely paper on a topic of significant importance in T2D research.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached):
1. It is important to justify the choice to dichotomize multiple variables in the analysis rather than treating them as continuous, to justify the specific cutpoints chosen, and to assess the robustness of the findings to modest changes in these cutpoints.
2. Some discussion of the appropriateness of including treated diabetics in the primary analysis would be worthwhile.

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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)
1. The paper was disappointing in the sense it is quite sloppily prepared. There are many typographical errors, punctuation errors, and an editorial question from one of the authors that is similar to my earlier comment.

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Discretionary Revisions (which the author can choose to ignore)
1. I personally do not like the attributable fraction which has the nasty habit of eventually adding up to way more than 1. I would avoid using this statistic, but that is personal taste.
2. There have recently been published a large set of TCF7L2 replications that probably should be cited.
3. I would not characterize an OR of 1.4-1.5 as a "strong association", even if the statistical evidence for that association is compelling.
4. The authors need to be more careful about the use of terms sample and population.

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 minor essential revisions

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:
I also work on the genetics of type 2 diabetes.