Reviewer's report

Title: Common variants of the TCF7L2 gene are associated with increased risk of type 2 diabetes mellitus in a UK-resident South Asian population: a case control study

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Reviewer: Philippe Froguel

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This is another paper on the evaluation of the risk for T2D conferred by TCF7L2 SNPs. It seems to be the first time that individuals having origins in North Indians are tested for this gene.

The results are as expected: moderately positive given the relative low frequency of the SNP T allele (SNP 146) in this population. Recent metaanalyses from Cauchy and also from Florez should be referred and discussed.

The most interesting data are related to the minimal age of the controls in a population at high T2D prevalence. Authors should discuss these data with regard to the age related prevalence of T2D in their population. Multiple regression analysis can also be done taking into account age.

Recent papers from DECODE discussed the influence of TCF7L2 on BMI in diabetics and also in controls that should be analyzed in this population. Is there insulin values?

Is the LD different from other populations?

These individuals have migrated from India to the UK. The environment is different in some respect. This aspect should be discussed especially if some data are available. As it is an intervention study the interaction between TCF7L2 and the intervention may be of interest (see the NEJM Florez paper and the recent Palmer C paper in diabetes on the effect of sulfonylureas).

What next?: Accept after minor essential 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, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

No