Reviewer’s report

Title: Polymorphisms near EXOC4 and LRGUK on chromosome 7q32 are associated with Type 2 Diabetes and fasting glucose; The NHLBI Family Heart Study

Version: 1 Date: 7 February 2008

Reviewer: Hiroshi Ikegami

Reviewer’s report:

This manuscript demonstrated that polymorphisms located nearby EXOC4 and LRGUK genes are associated with susceptibility to type 2 diabetes. The region on chromosome 7q22-36 is linked to obesity related traits in the family heart study.

1) Please describe about control subjects more precisely:
How were they recruited? How about family history of diabetes? Are they normal glucose tolerance?

2) Although authors mentioned that subjects with non-diabetics with homozygous deletion genotype showed significantly lower fasting plasma glucose than those with insertion allele, but no actual data were presented in this manuscript. Since deletion polymorphism is located on chromosome 7q32, authors should also present the data about metabolic syndrome and obesity-related traits of non-diabetic subjects with homozygous deletion genotype: e.g. BMI, waist circumference, TG, HDL-cho, blood pressure, and fasting insulin level.

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