Reviewer’s report

**Title:** Common Genetic Variants of the Ion Channel Transient Receptor Potential Membrane Melastatin 6 and 7 (TRPM6 and TRPM7), Magnesium Intake, and Risk of Type 2 Diabetes in Women

**Version:** 2  **Date:** 8 December 2008

**Reviewer:** Jian Zhang

**Reviewer’s report:**

In this paper the authors investigated potential contributions of 20 SNPs in two genes called TRPM6 and TRPM7 to risk of type 2 diabetes. They suggested two SNPs that might confer susceptibility to type 2 diabetes in women with low magnesium.

The paper was well written and acceptable. The statistical analysis is sounding to me in general. I have read through their point-to-point replies to the comments from the other referees. The paper has been improved.

**Discretionary revisions:**

When the authors stratified all cases and controls by magnesium intake using the magnesium intake less than 250mg/day, two SNPs reach the significance threshold. The authors might need a small discussion on (robustness of this choice) how the sensitive of this 250mg/day magnesium intake.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.