Reviewer's report

Title: Polymorphism of the FABP2 gene: a population frequency analysis and an association study with Cardiovascular Risk Markers in Argentina.

Version: Date: 22 February 2007

Reviewer: Viswanathan Mohan

Reviewer's report:

General

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

MAJOR COMPULSORY REVISIONS

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

This study assesses the prevalence of Ala 54 Thr polymorphism of the FABP2 gene and analyzes the possible associations with cardiovascular risk factors markers, viz. glycemia, total cholesterol, body mass index, hypertension, and high CVD index. The results suggest that the polymorphism had no association with the CVD risk factors.

The following are the concerns that need to be addressed:
1. The introduction needs to be shortened by 50%
2. The sample size is too small to come to any meaningful conclusions.
3. More details on sample selection will add value to the paper.
4. Table 1 shows the title as population genotype analysis, this may be substituted as GENOTYPE ANALYSIS IN THE STUDY SUBJECTS.
5. Page 5: Typographical error in the sub-title “Polymorphism association ….CVD risk markers “; it should read “CVD risk markers”
6. The authors might like to analyse the results using different models such as dominant, recessive and co-dominant as such an analysis would provide a clearer picture on the effect of the polymorphism.
7. In the introduction it has been mentioned that the expression studies suggest Thr 54 polymorphism secretes triglycerides at significantly higher rates than Ala 54 forms. However, the authors have not looked into this. This analysis would add value to the paper.
8. The authors need to review works carried out in other populations.
   Eg. Guettier et al, Clin Endocrinol Metab. 2005; 90: 1705-11
   Vimaleswaran et al, Metabolism. 2006; 55:1222-6

In these studies the polymorphisms have been shown to be associated with metabolic syndrome and dyslipidemia.