Reviewer's report

Title: Lack of association between peroxisome proliferator-activated receptors alpha and gamma2 polymorphisms and progressive liver damage in patients with non-alcoholic fatty liver disease: a case control study

Version: 1 Date: 13 June 2010

Reviewer: Masato Yoneda

Reviewer's report:

Major comment 1
As indicated in discussion, the authors have not yet demonstrated the therapeutic capacity of PPAR gamma agonists, thus I suggest to remove the last sentence of the abstract.

Major comment 2
In the statistical analysis section, the author mentioned about the sample size. The authors should mention about the result of the sample size in detail in the Result section.

Major comment 3
In this study, alcohol intake (>30/20g/day for M/F) were excluded. The references should be needed. Generally, the criteria for non-alcoholic is as follows.
AGA technical review (Gastroenterology 2002;123:1705-25) (20g/day?)
AASLD single topic conference (Hepatology 2003;37:1202-1219) (>20g/day for M and F)
APASL (J Gastroenterol Hepatol 2007:705-7) (>20/10g/day for M/F)
NIH clinical research network on NAFLD/NASH (Hepatology 2006;43:S899-) (>20/10g/day for M/F)

Major comment 4
The analysis is insufficient for the author’s conclusion. In addition to allele frequency model, other analysis should be needed. Such as recessive model, and dominant model.

Minor comment 1
NAS is “NAFLD activity score”. Please correct it.

Minor comment 2
What did the authors evaluate by using PAS stain, Perls stain?

Minor comment 3
The authors said that the minimum biopsy size was 1.7cm and the number of portal areas 10. Did All samples meet this criteria? This criteria was considerably
severe for achievement for all samples.

Minor comment 4

Although none of the control subjects had abnormal liver function or was obese, the authors cannot completely rule out the possibility that the control group included patients with mild steatosis. The author should mention as a limitation.

**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:**

I have no financial relationships to disclose.
There is no conflict of interest.