Reviewer's report

Title: Genetic association study of selected candidate genes (APOB, LPL, LEPTIN) and telomere attrition in obese and hypertensive individuals.

Version: 6 Date: 7 May 2009

Reviewer: Veryan Codd

Reviewer's report:

Major Compulsory Revisions

The authors have obviously made a great effort in improving the manuscript from the previous version. I still, however, have a major issue with the telomere length data. In the statistical analysis section the authors state that mean telomere length between the normal, obese and hypertensive individuals is compared by performing an ANOVA. However it is not stated if these values have been adjusted for age prior to this. If they have done so they need to state how this has been done in the statistical analysis section in the methods. As the mean values are the same as those stated in the previous version of the manuscript I must presume that these means are not age adjusted. The authors have performed a regression analysis of telomere length with age showing the expected decline in telomere length with age. I do not necessarily feel that graphical representation of this is required, but p values need to be stated. Performing the age regression for males and females separately is also not necessary for this number of subjects. The authors also report no significant difference in mean telomere lengths between male and female subjects but these means should also first be adjusted for age. If after this there is a significant difference between the genders after age adjustment then the telomere lengths also need to be adjusted for gender before comparing normal, obese and hypertensive groups. It is critical that the telomere lengths are either adjusted for age (and possibly gender) prior to performing an ANOVA or that the statistical test used to compare the means needs to be able to add age (and gender) as covariates within the analysis. As the authors show, telomere length declines with age and so the differences between the normal and hypertensive groups may merely reflect differences in the ages of individuals between the groups.

Minor Essential revisions

The title is “Genetic association study of selected candidate genes (apob, lpl, Leptin) and telomere attrition in obese and hypertensive Individuals”. This should state telomere length NOT attrition as length not rate of attrition is being compared.

Discretionary revisions

On page 10 the authors state that the standard error between replicates was approx >0.5 (greater than 0.5, I believe the authors actually mean <0.5 (less than 0.5).
Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:

I declare that I have no competing interests