Reviewer's report

Title: Serum levels of Pancreatic Stone Protein (PSP)/reg1A as an indicator of beta-cell apoptosis suggest an increased apoptosis rate in hepatocyte nuclear factor 1 alpha (HNF1A-MODY) carriers from the third decade of life onward

Version: 2 Date: 26 April 2012

Reviewer: katharine owen

Reviewer's report:

Major Compulsory Revisions
1. I continue to be unconvinced by the use of the small family control group. Looking at figure 1, the PSP levels in these individuals have an odd bimodal distribution. I would leave this data out and delete figure 1.
2. It seems that it is difficult to draw any conclusions from the GCK-MODY group, probably due to the limited numbers available. I would say this and not over interpret.
3. Fasting c-peptide in T1DM: If using median (IQR) you can still report this as the median will be <0.5 mcg/L (ie median value is below the detection range of the assay). Mcg/L is an unusual unit but I think equivalent to ng/ml ? You should be confident that the clinical diagnosis is T1DM in those with persistent C-peptide outside the honeymoon period. If not better to remove them from the group. Shouldn’t there be a paired fasting glucose for the T1DM cases as well?
4. Discussion: Can you really say you have shown that PSP/reg1A is “an indirect marker of beta-cell mass” ?

Minor essential revisions
1. Abstract Results: include the number of HNF1A cases as well as the number of controls.
2. Table 1:
   Please include the numbers in each group in the table.
   I would also add the GCK diabetes duration to the table as “from birth”
   Make sure decimal places are consistent and appropriate (e.g HbA1c in the HNF1A-MODY group 7(6.3-7.93) )
3. Background:
   Gene names – should be lower case for KO mouse
   “May be”, not maybe

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 declare that I have no competing interests