Reviewer's report

Title: Insulin Resistance and Adipokines serum levels in a Caucasian Cohort of HIV-positive Patients Undergoing Antiretroviral Therapy: a cross sectional study

Version: 3 Date: 20 December 2012

Reviewer: Ole-Petter Hamnvik

Reviewer's report:

This is a revision of a paper that I previously reviewed. The prior comments have mostly been addressed satisfactorily, with some exceptions:

- There are some typographical error. Would recommend using spell-check software to fix this, or have the paper revised by a native English speaker.

- Page 3: Many of the adipokines that the authors say are synthesized by adipocytes are in fact synthesized by inflammatory cells within adipose tissue. Would therefore change "adipocytes synthesize..." to "adipose tissue synthesizes..."

- Page 8: The authors say that the low correlation coefficients are caused "in part by low number of subjects...". This is not correct. The low correlation coefficients is caused by low correlation, but the low number of subjects may lead to a high number of false negatives (i.e., falsely high p-values). So I would just say that the correlations were small to moderate in magnitude.

- The authors have added some more data about HOMA-IR, which is helpful. I would also like to see the percent of the population with insulin resistance based on HOMA-IR, and the cut-off that they used (Romania specific or general Caucasian cut-off).

- Table 1: Include how they defined dyslipidemia.

- I would add a sentence saying that consent was obtained from the research subjects.

- Is the normal range for QUICKI correct? 0.37 to 0.39 seems very narrow, and the cut-off for IR is below the normal range.

- Bottom of page 5: Would clarify that this is for the entire population (it's a bit confusing because there are more correlations at the top of page 6, but these are for men, then women).

- I appreciate being shown the data on what happens when age / BMI are included in the statistical models - the association between IR and leptin (or triglycerides / adiponectin) disappears. This is important information that should be included - it's difficult to know if they are confounders or on the causal pathway. Regardless, the authors should mention that the association disappears after including age and BMI in the regression model, and discuss theories about why (low n with loss of power as more variables are added? Changes in adiponectin with age / BMI causing IR? Other theories?).
Level of interest: An article whose findings are important to those with closely related research interests

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