Reviewer's report

Title: Circulating adiponectin levels are lower in Latino versus non-Latino white patients independent of adiposity measures: a cross-sectional study

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Reviewer: Aletta Schutte

Reviewer's report:

Pereira et al present interesting results based on adiponectin levels of the Latino population as a possible cause for the development of type 2 diabetes in this population group. The paper contains the first results on high-molecular weight adiponectin in this group, and also investigates the adiponectin:HMW ratio in Latino and a Caucasian group.

Major Compulsory Revisions:

1. The results of this study would bear much more weight if healthy control groups were included. It should not be stated in the main conclusion: "We report decreased adiponectin levels in Latinos compared to non-Latino whites, independent of adiposity measures". If it is impossible to include data from healthy/lean controls, then the conclusion should be changed to: "We report decreased adiponectin levels in Latinos at increased risk of cardiovascular disease, when compared to non-Latino whites, independent of adiposity measures".

2. The obesity variance in both Latino and non-Latino groups were perhaps too small to truly investigate the associated between e.g. BMI or WC and adiponectin. It is quite strange that no significant association between BMI and adiponectin were found in any group, which may make one doubt the data a bit. However, it is perhaps the fact that both groups were quite obese. This should be addressed in the Discussion.

Discretionary Revisions

1. It would have been very helpful if data on leptin were included. It may perhaps be mentioned in the Discussion.

2. The beta estimates in the abstract may be confusing to the reader.

3. The introduction could be shortened.

4. The last paragraph of the Introduction section contain the main results. Usually this is only indicated in the Discussion section.

5. Describe the methods more clearly: "All other labs were measured by ... standard procedures".

6. Explain all abbreviations at the bottom of the tables.

7. Grammar editing is necessary, with many places "was" where it should be "were".
8. Figure 1: Please indicate p-values in the figure.
9. Figure 1: Please indicate at the Y-axis: Total adiponectin.
10. Results: (Correlates of adiponectin) It is mentioned that TZD use was positively associated with adiponectin levels in both ethnic groups, but it was only with Latinos according to Table 2.
11. It is unclear why some of the main results are shown in bold in the Results section.
12. Mention r and p-values in Figures 2 and 3.
13. The icons used in Figure 3 are similar for Latinos and non-Latinos, which is confusing.

**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:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.