Reviewer's report

Title: Metabolic correlates of subcutaneous and visceral abdominal fat measured by ultrasonography in at risk subjects

Version: 1 Date: 20 September 2015

Reviewer: Hanen SAMOUUDA

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Review of the manuscript of Bertoli et al. “Metabolic correlates of subcutaneous and visceral abdominal fat measured by ultrasonography in at risk subjects”.

Reviewer: Dr Hanen SAMOUUDA

Comments to the Authors

A very important issue, related to the accurate and simple measurement of visceral adiposity and its relationship with cardiometabolic risk factors, was raised by the Authors in this study.

The question posed by the authors is well defined.

The methods are appropriate and well described, and sufficient details are provided to replicate the work.

Data sound and seems well controlled.

Figures appear to be genuine.

The manuscript adhere to the relevant standards for reporting and data deposition.

Discussion is well balanced and adequately supported by the data.

I have only some useful comments.

Minor Essential Revisions:

- The abstract seems to do not highlight the principal aims of the study, which is, as cited by the Authors in the paper on pages 3-4, lines 55-63:
  1. To evaluate if VAT, as assessed by ultrasonography, is a more accurate predictor of several cardiometabolic risk factors than WC in adults, and;
  2. To evaluate if US-SAT, associated to US-VAT, may improve this prediction.

This seems to be also the case for the conclusion (page 14, lines 259-264) and the title, as well.

Title, abstract and conclusion should be rephrased.

- In perspective (page 14, lines 265-266), the Authors underline the importance to conduct longitudinal studies in order to follow the evolution overtime of VAT, SAT and their potential relationship with cardiometabolic abnormalities, which is
a very good point. However, please link this perspective with the measurement of abdominal adipose tissue by ultrasonography.

**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