Reviewer’s report

Title: Inter and intra-reliability of ultrasonography for the measurement of abdominal subcutaneous & visceral adipose tissue thickness at the 12 weeks gestation

Version: 0 Date: 22 Jul 2019

Reviewer: Federico Federico

Reviewer's report:

Interesting original investigation, especially in a complex field of paraphysiological modifications like pregnancy, where body composition is "disrupted". Ultrasonography has the potential to become the method of choice in the body composition assessment of pregnant women due to X-ray contraindications of gold standard techniques, such as CT and DXA.

In the introduction and discussion sections, the link between cardio-metabolic risk and adipose tissue compartments (VAT and SAT) modifications during pregnancy should be explained in more detailed to understand the clinical significance of reliability of these US measurements. In particular, there is not mention of the role of the subcutaneous adipose tissue in the pathogenesis of metabolic and cardiovascular health risk in pregnant population; the paper could be improved.

Regarding to Methods the authors describe that the transducer is perpendicular to the skin (line 95), but the Figure 1 seems to show an axial ultrasound scan; the ultrasound measurements of adipose tissue compartments in Methods should be rewritten because of not clear interpretation (a schematic anatomic figure would help).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
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No
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I am able to assess the statistics

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