Reviewer’s report

Title: Association between the DNA methylations of POMC, MC4R, and HNF4A and metabolic profiles in the blood of children aged 7-9 years

Version: 0 Date: 29 Dec 2017

Reviewer: Federico Baronio

Reviewer’s report:

The Authors reported on their findings about methylation status of genes involved in obesity and metabolic syndrome, and the association with biochemical traits in a group of obese and normal weight children.

This work is well conducted and the results are clear and show some important results.

I can suggest to improve the discussion section, giving some further interpretation to the results on the basis of the existing literature, in particular concerning the clinical usefulness of these epigenetic markers of MetS.

Furthermore the authors should consider some minor issues:

line 199 the sentence is not clear: "and" should be erased

line 201 consider to stop the sentence after "general population"

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

Yes

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?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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