Reviewer's report

Title: Effects of short-term radiation emitted by WCDMA mobile phones on teenagers and adults

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Reviewer: Caterina Cinel

Reviewer's report:

The manuscript is a description of a study investigating effects of WCDMA mobile phone radiation on teenagers' autonomic nervous system. The study is an important one as it addresses an issue that is still very controversial. Effects of mobile phones EMF are still not clear, and with increasing use of mobile phones within the younger population, studies of the kind described in the manuscript are much needed.

The manuscript describes clearly the purposes of the study and the method overall is well defined and appropriate for the type of study. The authors described with full details the method used and according to conventions in the field, and the statistical analyses conducted on the data are appropriate (including Bonferroni corrections) and accurate.

Title and abstract describe clearly and appropriately the study; the introduction gives a sufficient review of the relevant literature, with a clear rationale for the study; and discussion and conclusions and well supported by the data.

Discretionary Revisions:

1 - In the introduction, page 5, in relation to the statement “Although such studies as mentioned above have examined the effects of GSM mobile phone on teenagers or children, there are very few studies investigating about the effects of WCDMA mobile phone radiation on children or teenagers”, it might be worse explaining why and how WCDMA may have different effects from GSM mobile phones.

2 - Limitations are discussed, including the limited number of participants. However, I believe that the authors should clearly stress the fact that any effect of WCDMA mobile phone radiation on the autonomic system might be quite limited, and therefore difficult to detect. Therefore, to draw some more definitive conclusions on this, a much larger sample will be needed.

3 - Also, this study investigates short term effects of mobile phones EMFs. As many other studies on short-term effects (studying subjective symptoms, cognitive processing, etc), no differences were found between sham and real conditions, and this could indeed be the case. It should however be noted (in the
discussion section) that it is the repetitive and regular exposure to mobile phone EMFs that could be hazardous to young persons (as well as to adults).

**Level of interest:** An article of importance in its field

**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.