**Reviewer's report**

**Title:** The influence of the rs1137101 genotypes of leptin receptor gene on the demographic and metabolic profile of normal Saudi females and those suffering from polycystic ovarian syndrome

**Version:** 2  **Date:** 04 Jan 2018

**Reviewer:** Uma Addepally

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Comments

1. In the anthropometric measurements and metabolic profile of POCS patients and controls (table 1), the crucial factors like Leptin, Ghrelin and HOMA-S the p values are much higher than 0.05. Does it give any significance between PCO and controls?

2. Does any allelic position specificity of Grouping of three genotypes- AA, AG and GG of rs1137101 exists.

3. Although several variants are involved with rs1137101 any specific reason to consider Gln233Arg.

4. Some places it is mentioned as Glu233 (Gln233)

5. If there is no difference between PCO and control for rs1137101 (non synonymous polymorphism), what is the role of Gln 223 in leptin binding or in transmembrane signaling (line no 6 in results)

These comments if relevant may be addressed in the Manuscript and may be accepted for publication as this is a first study on rs1137101 in Saudi 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 am able to assess the statistics

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

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