Reviewer’s report

Title: Using KASP Technique to screen LRRK2 G2019S mutation in a large Tunisian cohort

Version: 0 Date: 20 Feb 2017

Reviewer: Nicolas L. Dzamko

Reviewer’s report:

The Manuscript by Landoulis et al. assess the usefulness of the KASP PCR technique for genotyping of the LRRK2 mutation. I only have a few comments

1) the conclusion states that compared to other techniques the KASP assay was reliable, time and cost efficient. However no data to support this conclusion is given in the paper. What other techniques? What was the time and cost saving?

2) It is mentioned in the methods that KASP results were verified by Taqman assay and Sanger sequencing. No data is provided. What taqman assay was used? How was sanger sequencing performed? were all subjects the same genotype or were any differences encountered? Were the controls identified that had the G2019S mutation also genotypes as such by the "other methods"?

3) Please give details of KASP primers and catalogue numbers of Taqman assays

4) In the discussion it is important to note that the controls with G2019S mutation are currently under the general age-at onset for PD and thus rather than healthy controls they may actually be at risk carriers that could develop PD in ~10 years or could likely even be in the prodromal phase of PD.

5) Please look at the following paper which I think also uses KASP PCR to screen for LRRK2 mutations and if this paper is not the first as claimed then please amend. Journal of Human Genetics (2015) 60, 357-362

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?
If not, please explain in your comments to the authors.
No

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.

Not relevant to this manuscript

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

Acceptable

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