Reviewer’s report

Title: The Captopril Challenge Test for Diagnosing Primary Aldosteronism in a Chinese Population

Version: 0 Date: 13 Mar 2019

Reviewer: Candy Sze

Reviewer’s report:

Overall: An interesting study, raising the point that a CCT cut off value may not be valid internationally. However, this point has already been looked into by another group in China, Song et al, which you have referenced. Is the study to confirm the inaccuracy of CCT and the use of post-CCT ARR in the Chinese population, which has been already been published by 2 different Chinese groups already. The use of a post CCT AAR cut off of 20 is already in the Japanese and Taiwan guidelines.

I am not convinced by what is new to this study that has not already been published

Background - I think it is unclear why CCT was chosen over the other confirmatory tests. Is it the cheapest method or most accessible method? Is it be cheaper than oral sodium loading? What is the accuracy of the other confirmatory tests in the Chinese population, which could be used instead if CCT is not appropriate for the Chinese population?

Method - for adrenal venous sampling with synacthen infusion - a cannulation ratio of >2 seems to be a bit low, can you explain why you have chosen 2, as Mayo Clinic uses a ratio of >5

I think the study needed another confirmatory test to confirm the diagnosis and its accuracy to make this study stronger or collaborate and have the same study comparing Asian and western population.

Results and conclusion drawn was all appropriate but I just cannot see anything new in your results that is not already in the literature.

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.

No

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:

Needs some language corrections before being published

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