Reviewer's report

Title: Possible mechanism underlying the effect of Heshouwuyin, a tonifying kidney herb, on sperm quality of aging rats

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Reviewer: Diego Bucci

Reviewer's report:

Comment to the Authors

General comments
The article has been revised and the man points were adjusted to the request.
There is an important point: the results are badly written, quite difficult to be comprehended. Figures are very badly managed, in particular graphics. The superscript letter are useful to determine the difference between the treatments, but in this case they have been misused. Check on scientific literature a similar study in which superscript letters are properly used!
In statistical analysis, the new data from cells (immunofluorescence for StAR and P450) count should be analyzed with a model with Poisson errors! Alternatively, if the Authors would express these data as percentage of positive cells on the total number of cells counted (that seems to be more appropriate), they can use one way ANOVA.
In addition the paragraph on testicular tissue evaluation is not acceptable. They cannot describe what they see without any measurements; differences must be scientifically expressed with numbers derived from measurements. The approach on seminiferous tubules area is good, but no mention of the specific technique used to calculate this area is present in the M and M section.
The first 4 lines of the Results paragraph concerning “Testicular parameter changes” belong to Materials and Methods. These are not results. These are methods!
On the basis of what stated above, I would consider the article for publication after a very thorough revision.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.