Reviewer’s report

Title: Testicular expression of TDRD1, TDRD5, TDRD9 and TDRD12 in azoospermia

Version: 0 Date: 11 Nov 2019

Reviewer: Sumantra Chatterjee

Reviewer's report:

The article by Babakhanzadeh et.al. looks at the gene expression levels of 4 Tudor domain containing proteins (TDRD) TDRD1, TDRD5, TDRD9 and TDRD12 in testicular biopsy samples of obstructive azoospermia compared to different cases of non-obstructive azoospermia, with the rational being that non-obstructive azoospermia would have genetic causes beyond morphological changes. The paper is interesting in pointing towards these specific genes as "causal" for non-obstructive azoospermia, but could do with some more polish before its ready for publication

Comments

1) Please explain the rational of using obstructive azoospermia as a control. Its is not mentioned anywhere and would be unclear to the readers

2) Describe the histological differences in Figure 2. The authors say "clear difference", but do not articulate them.

3) Get better images for the histological sections (Figure 2). The contrast and color saturation are all over the place.

4) Please use a different color for the text inside the figure 2. Its very hard to read.

5) Why does the expression value for each gene in the control (obstructive azoospermia) have an error bar? The expression has been set to unity so by definition it cannot have variance.

6) The section the discussion about TDRD1 and suppression of transposon is highly speculative from the current study. I would remove it.

7) There are numerous spelling and editing errors all through the manuscript. Please do a thorough check and editing.
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:

Needs some language corrections before being published

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