Reviewer’s report

Title: Chromosome (re)positioning in spermatozoa of fathers and sons - carriers of reciprocal chromosome translocation (RCT)

Version: 0 Date: 01 Oct 2018

Reviewer: Rui-zhi Liu

Reviewer's report:

Based on the previous research, the authors of this manuscript further explored the positioning of nine chromosomes' centromeres was (re)arranged in their spermatozoa in fathers and sons - carriers of the same RCT. The authors showed that chromosomal factors have been superior ones influencing strongly chromosomal topology, when confronted with the sperm chromatin integrity components.

This is a very interesting research paper. But, there are two problems as follows:

1. In abstract, the authors described 13 carriers of 11 RCTs, including two familial RCT cases: t(4;5) and t(7;10), followed by the analysis of the eight control individuals. In fact, there are nine individuals. Please check.

2. Please check the probes used in experiments, 4-locus D3Z1(4P11-Q11) in slide preparation of FISH in page 6.

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 recommend additional statistical review

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

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