**Reviewer’s report**

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

**Version:** 0 **Date:** 11 Sep 2018

**Reviewer:** T. Liehr

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Major comments

This per se interesting studies has two major problems:

1. The study was done on flattened and not 3D preserved nuclei

2. This study only used centromeric probes

The widely normal results found are not surprising acc. to the methods used, as translocations happen not in centromeres but in euchromatin far away from studied regions.

This study only shows that centromeres are obviously not affected by the translocations but do not proof that RCTs have no influence on nuclear architecture.

Also results need at least for one case and one control to be verified in 3D presevered interphase nuclei.

Minor comments

- Introduce abbreviations like RCT when used first time in abtrcat as well as in text

- It must read as fluorescence in situ hybridization (FISH) through whole text and not Fluorescent in situ hybridization (FISH)

**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.

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:

Needs some language corrections before being published

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