**Reviewer's report**

**Title:** Tract integrity in Amyotrophic lateral sclerosis: 6-month evaluation using MR diffusion tensor imaging.

**Version:** 0  **Date:** 30 Aug 2018

**Reviewer:** Reviewer 2

**Reviewer's report:**

30-08-2018 (TS) - PEER REVIEW STEP COMPLETE - sound research report uploaded as reviewer attachment.

OUTCOME: REVISE (major)
Publishable with major author effort

Confidential comments from RSQ review coordinator: N/A

Confidential comments from the academic peer reviewer: The authors present a longitudinal study of diffusion-tensor imaging (DTI) in 23 patients with ALS during a period of 6 months. The use of DTI in ALS to evaluate changes is an open issue in the literature and may be of interest. However, the interest of the manuscript is limited by the negative results. I think that these "negative" results should be used in a "positive" way (for instance, discussing the sample size needed in clinical trials when using this neuroimaging technique or other assessments).

**ACADEMIC PEER REVIEWER DETAILS:**

Jordi Matias-Guiu, MD.
Clinical - Physician, Hospital Clínico San Carlos.
https://www.researchgate.net/profile/Jordi_A_Matias-Guiu
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
**Declaration of competing interests**

Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

This reviewer has been recruited by a partner organization, Research Square. Reviewers with declared or apparent competing interests are not utilized for these reviews. This reviewer has agreed to publication of their comments online under a Creative Commons Attribution License attributed to Research Square and was paid a small honorarium for completing the review within a specified timeframe. Honoraria for reviews such as this are paid regardless of the reviewer recommendation.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license ([http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.