Reviewer’s report

Title: Cortical thickness in amyotrophic lateral sclerosis - evidence for extramotor involvement

Version: 1 Date: 28 April 2013

Reviewer: Peter Bede

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Minor remarks:

1. In the introduction the authors state that “up to five percent of patients develop dementia”. Please note that some neuropsychology studies in ALS indicate a much higher percentage, even for those with frank FTD, not to mention ALS patients with executive dysfunction.

2. “That such involvement is the rule rather than the exception has been underscored by findings from neuropsychological [1-4] and neuroimaging [5-8] investigations” Additionally, there is compelling evidence that genetic factors ie.: C9orf72 hexanucleotide repeat might contribute to extra-motor involvement in ALS.

3. “Bulbar involvement was described as a sum score of dysarthria (0 = no, 1 = yes), dysphagia (0 = no, 1 = yes), eyelid closure, mouth closure, tongue movement and palate elevation (0 = normal, 1 = reduced, 2 = weak, 3 = absent) with a lowest possible score of 14” Dysarthria and dysphagia are the commonest bulbar symptoms, yet in the proposed composite score they are weighted differently (0-1) from the other components (1-3).

4. In Figure 3, a negative correlation is presented between ALSFRS-R scores and cortical thickness values. Please consider including a brief discussion of these findings.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'