Reviewer's report

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

Version: 1 Date: 16 July 2013

Reviewer: Benjamin Rix Brooks

Reviewer's report:

Major Compulsory Revisions
-Better presentation of data in more complete fashion either in tables or supplementary tables
-Addition of missing references

1. Is the question posed by the authors well defined?
Yes Authors present data comparing CTA with VBM

2. Are the methods appropriate and well described?
Yes

3. Are the data sound?
Data are probably sound but presentation is not in the form of means(SDs) like the Agosta paper. Data should be presented in tables by region of interest. Good group but this report needs improvement

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
The authors with a smaller dataset give information different from what is in the literature. There dataset is more male than the Agosta paper but the raw data needs better presentation in this paper in order to be adequately evaluated.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
More careful description of how CTA adds to the VBM data could be enhanced by presenting the data in more formal way. Also consider adding the following reference

Neuroimaging in amyotrophic lateral sclerosis.
Turner MR, Agosta F, Bede P, Govind V, Lulé D, Verstraete E.
PMID:22731907PMID:22880116

6. Are limitations of the work clearly stated?
Partially. The new data of apparent increased thickness needs better presentation.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   Missing references

8. Do the title and abstract accurately convey what has been found?
   Yes but could speak directly to a comparison of VBM and CTA

9. Is the writing acceptable?
   The authors cite three papers in the text that are not in the references

   The cortical signature of amyotrophic lateral sclerosis.

   Structural MRI reveals cortical thinning in amyotrophic lateral sclerosis.
   Verstraete E, Veldink JH, Hendrikse J, Schelhaas HJ, van den Heuvel MP, van den Berg LH.

   Verstraete E, van den Heuvel MP, Veldink JH, Blanken N, Mandl RC, Hulshoff Pol HE, van den Berg LH.

   **Level of interest:** An article whose findings are important to those with closely related research interests

   **Quality of written English:** Not suitable for publication unless extensively edited

   **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