Reviewer's report

Title: Structural brain changes in First Episode Schizophrenia compared with Fronto-Temporal Lobar Degeneration: a meta-analysis

Version: 2 Date: 8 May 2012

Reviewer: Neeltje van Haren

Reviewer's report:

The authors take an interesting approach by comparing brain structural abnormalities between FES and FTLD, using a meta-analytic approach. They use anatomical likelihood estimation (ALE) to determine the extent of gray matter decreases in each disorder and to analyze the degree of overlap in the spatial distribution of brain changes. They show that there is a significant overlap indeed, suggesting a common aetiology.

I think this is an interesting approach, and as the authors implicate, it can provide the field with new insights without having to collect new datasets.

I have three minor but essential suggestions for revision:

1. The authors argue that they chose to examine FES rather than chronic schizophrenia because the structural changes in FES may more accurately reflect the pathological changes of the disorder (second paragraph introduction). But they do not elaborate on this. How is this the case?

2. Moreover, a more extensive overview how clinical features of FTLD are similar to FES in the context of age of onset, course of the illness (episodic like FES?), prodromal features, neurodevelopmental course, incidence.

3. Finally, the authors argue that the new statistical approach they use might be relevant for individualized medicine. I would suggest to elaborate on this in the discussion section and explain what part of their method is crucial and how it can be used in a clinical setting under what conditions.

I am not an expert on ALE so I cannot comment on the statistics used.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests