Reviewer’s report

Title: Association between multiple sclerosis and epilepsy: large population-based record-linkage studies

Version: 3 Date: 24 September 2013

Reviewer: Philip Iffland

Reviewer’s report:

Major Compulsory Revisions: NONE

Minor Essential Revisions:
- Introduction, Paragraph 1: epilepsy prevalence of 0.5% needs a citation
- Introduction Paragraph 1: "epileptic fits" is no longer acceptable terminology within the field. Change to "epileptic seizure"
- Throughout the manuscript, and in particular in the methods and results sections, sentences are confusing and to "wordy". E.g., Materials and Methods 1st paragraph, sentence "The population covered by the ORLS expanded..." Please revise sections in the paper that are unclear.
- Materials and methods/Results: It may be important to discuss how the rate of epilepsy (RR) in control cohort matches what is generally accepted for the various age groups. It may be also useful to present the expected rates for MS in controls compared to your findings. Detailing the rate/prevalence of MS and epilepsy in the control groups will allow the reader to visualize differences in the population rather than simply relying on text.

Discretionary Revisions
- While the tables do summarize and detail the findings adequately it would be of great benefit to have some of these data represented graphically. This would allow a visual comparison between groups. For example, a Venn diagram would be useful to examine the intersections and differences between your cohorts. In addition, the reader may be able to understand your data better in tables 2 and 3 if they were presented in bar graph format.

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

Quality of written English: Needs some language corrections before being published

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