Reviewer's report

**Title:** Prognosis and therapy of tumor-related versus non-tumor-related status epilepticus: a systematic review and meta-analysis

**Version:** 1  **Date:** 6 May 2014

**Reviewer:** Christoph Kellinghaus

**Reviewer's report:**

Major compulsory revisions

1. The authors state that there may be specific pathophysiological mechanisms of epilepsy in brain tumors. Although this may be true, one has to consider that there are several very distinct subgroups of brain tumors such as low-grade and high-grade glial tumors, meningeomas, filiae of systemic cancer etc. which all may act in a different way. In the studies they analyse, it is impossible to distinguish between these subgroups. The mechanisms and thus outcome of tumor-related SE may differ between these tumoral subgroups. This is a severe limitation of the study and has to be discussed.

2. Although the authors point to the severe limitations of their study in the discussion part, the methodological problems are not transferred sufficiently into the conclusion part. This should be changed.

3. Did any of the studies include hypoxic/anoxic etiology of SE? If so, this needs to be clearly marked, and the number of patients need to be reported because this directly influences the outcome of the non-tumor group of patients.

4. I can not asses whether the statistics using pooled data from very heterogeneous studies are correct. I recommend to get an assessment from a professional statistician.

Minor essential revisions

5. It is unclear why the authors chose the duration of 30 minutes as cut off for inclusion. Most recent studies use 5 minutes or 10 minutes and would be excluded here.

Discretionary revisions:

6. It would be recommendable to compare the tumor-etiologies not only to all non-tumor etiologies, but to pick a distinct subgroup for comparison, such as traumatic or ischemic.

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

**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