



Reply

Reply to 'Computation of antiepileptic drug retention rates in the presence of a competing risk'



To the Editor,

We are very grateful for the comments of van der Meer et al. on our paper describing retention rates of the first prescribed antiepileptic drugs (AEDs) in a large cohort of patients with poststroke epilepsy [1]. We decided to use Kaplan Meier (KM) analysis for several reasons. Firstly, the basic assumption of a KM analysis, that censoring (because of death) is independent of the outcome (discontinuation of an AED) seems reasonable. Secondly, one of the benefits of a KM analysis is that it allows easy comparison with the existing literature. KM analyses are widely used for estimates of retention rates of AEDs, also in the elderly [2–4].

Furthermore, we are uncertain that a competing risk analysis would be the most informative model for our research question. The patient and the neurologist are typically interested in the likelihood of discontinuation under the assumption that no competing death will occur. In addition, we are doubtful that a competing risk analysis would be appropriate for our data, since detection of the competing events would not be equal. Our conservative method of defining discontinuation as absence of prescription renewal in 12 months means that patients must have survived for at least this time to allow detection of discontinuation. Put differently, for 12 months following each renewal, death and discontinuation are not competing events – only death can occur. For this reason, the non-informative censoring at death in KM seems more appropriate. It is true that KM estimates become less precise and that

event probability may be overestimated towards the end of the analysis. We think most readers are well aware of this drawback of a KM analysis.

Competing risks are an important concept. The points raised by the authors are informative and enhance the understanding of our paper. However, we think the original KM analyses are better suited to our material.

References

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