

Treatment of first unprovoked seizure should be individualised

Clinical Question	Compared to controls, how effective is antiepileptic drug treatment given immediately after the first seizure in terms of seizure recurrence, seizure remission, mortality and adverse effects?
Bottom Line	There was high quality evidence that antiepileptic drug treatment following a first unprovoked seizure reduced the risk of relapse but did not affect the proportion of patients achieving a five year remission in the long-term. Antiepileptic drug treatment did not affect overall mortality after a first seizure. There was moderate to low quality evidence that treatment was associated with adverse events (a particular concern for children, women considering pregnancy, pregnant women, and the elderly). The decision to start antiepileptic drug treatment following a first unprovoked seizure should be individualised and based on patient preference, clinical, legal, and socio-cultural factors.
Caveat	Overall, the quality of the evidence from the included studies was high for seizure recurrence, remission and mortality outcomes. Quality of the evidence for adverse events was moderate to low, with variable reporting across studies and imprecision in effect sizes due to small numbers of adverse events occurring. In all the studies only first-generation drugs (except for lamotrigine) were assessed.
Context	There is considerable disagreement about the risk of recurrence following a first unprovoked epileptic seizure. A decision about whether to start antiepileptic drug treatment following a first seizure should be informed by information on the size of any reduction in risk of future seizures, the impact on long-term seizure remission, and the risk of adverse effects.
Cochrane Systematic Review	Leone MA et al. Immediate antiepileptic drug treatment, versus placebo, deferred, or no treatment for first unprovoked seizure. Cochrane Reviews, 2016, Issue 5. Art. No.: CD007144.DOI: 10.1002/14651858. CD007144.pub2. This review contains six studies involving 1,634 participants.
