

Carbamazepine is metabolised in the liver and can cause enzyme induction which may affect the metabolism of other drugs (see DRUG INTERACTIONS). It takes about 3-10 days to reach steady state (steady plasma level).

Valproate is metabolised in the liver and causes enzyme induction. It takes 2-4 days to reach steady state.

Gabapentin is not bound to plasma proteins, does not induce hepatic enzymes and is not metabolized. At steady state (after 1-2 days of same dose), it has a half-life of 6-8 h, and is eliminated unchanged via the kidneys

Lamotrigine is rapidly absorbed when taken orally, peak plasma levels being reached in 1.5-4 hours. Its half-life once it reaches steady state (after 5-15 days) is 33 hours. It is metabolised by the liver (it can induce its own metabolism and also that of other drugs); metabolites and unchanged drug being excreted in the urine.

Topiramate is metabolised in the liver but does not affect hepatic enzymes. It takes 4 days to reach steady state.

Second generation AEDs have a wide therapeutic window (i.e. between dose required for therapeutic effect and that which is toxic) EXCEPT felbamate.

Most second generation AEDs do not cause liver enzyme induction (which can affect the way in which other drugs are metabolised).