Primidone is an anticonvulsant of the pyrimidinedione class. Its active metabolites, phenobarbital (minor) and phenylethylmalonamide (PEMA) (major), are also anticonvulsants. It is believed to work via interactions with voltage-gated sodium channels which inhibit high-frequency repetitive firing of action potentials [1]. The effect of primidone in essential tremor is not mediated by PEMA.[76] The major metabolite, phenobarbital, is also a potent anticonvulsant in its own right and likely contributes to primidone’s effects in many forms of epilepsy [2]. Primidone and the other enzyme-inducing anticonvulsants can cut the half-life of antipyrine roughly in half (6.2 ± 1.9 h vs. 11.2 ± 4.2 h), and increases the clearance rate by almost 70%. Phenobarbital reduces the half-life to 4.8...

References: