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Primidone

National Cancer Institute

Source

National Cancer Institute. *Primidone*. NCI Thesaurus. Code C47686.

An analog of phenobarbital with antiepileptic property. Although the mechanism of action has not been fully elucidated, primidone probably exerts its actions, in a manner similar to phenobarbital, via activation of gamma-aminobutyric acid (GABA)-A receptor/chloride ionophore complex, which leads to prolonged and increased frequency of opening of the chloride channel within the receptor complex. This results in an alteration in the electrical activity of the nerve cell membrane, causing hyperpolarization and prevention of partial and tonic-clonic seizures. In addition, this agent is partially metabolized to phenobarbital and phenylethylmalonamide (PEMA), which may also contribute to its anti-seizure properties.