

Optimizing Seizure Control through Combination Therapy in Epilepsy

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Abstract: *Combination therapy has emerged as a vital strategy for enhancing treatment outcomes and improving the quality of life for individuals with epilepsy. This approach involves administering multiple antiepileptic drugs (AEDs) simultaneously to achieve better seizure control, improved efficacy, and reduced side effects. Research has shown that certain AED combinations, such as valproate, exhibit remarkable synergy, producing supra-additive anticonvulsant effects. However, careful risk-benefit assessments are necessary to mitigate potential increased side effects. This review highlights the benefits and challenges of combination therapy in epilepsy, discusses the mechanisms of action of various AED combinations, and explores the potential for personalized medicine approaches to optimize seizure control and improve patient outcomes.*

Keywords: Seizure, Antiepileptic, combination therapy