

## Special Issue

# The Latest Research on Drug Treatment of Epilepsy

### Message from the Guest Editors

Epilepsy, a prevalent neurological disease, and is characterized by recurrent seizures due to excessive neuronal excitability and synaptic dysregulation. Current antiseizure medications (ASMs) aim to reduce seizure frequency but often fall short in providing complete control or preventing disease progression. Here, in this Special Issue, we provide the latest research on anti-inflammatory molecules as a potential treatment for seizures and epilepsy. Studies indicate that inflammatory responses from neurons, microglia, astrocytes, and blood–brain barrier (BBB) disruptions are associated with seizure onset and the development of chronic epilepsy. Medications that reduce these inflammatory effects may be valuable in modulating the course of epilepsy. Ongoing studies also explore other drugs targeting and molecule determinants, which are integral to the inflammatory cascade associated with epilepsy. Although more clinical trials are necessary, these drugs could significantly alter treatment approaches for epilepsy, especially in cases that do not respond well to traditional anti-seizure medications.

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### Deadline for manuscript submissions

closed (5 May 2025)



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