Overview

Third-generation antiepileptic drugs: mechanisms of action, pharmacokinetics and interactions

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Abstract:
This review briefly summarizes the information on the molecular mechanisms of action, pharmacokinetic profiles and drug interactions of novel (third-generation) antiepileptic drugs, including brivaracetam, carabersat, carisbamate, DP-valproic acid, eslicarbazepine, fluorofelbamate, fosphenytoin, ganaxolone, lacosamide, losigamone, pregabalin, remacemide, retigabine, rufinamide, safinamide, seletracetam, soretolide, stiripentol, talampanel, and valrocemide. These novel antiepileptic drugs undergo intensive clinical investigations to assess their efficacy and usefulness in the treatment of patients with refractory epilepsy.

Key words:
antiepileptic drugs, brivaracetam, carabersat, carisbamate, DP-valproic acid, drug interactions, eslicarbazepine, fluorofelbamate, fosphenytoin, ganaxolone, lacosamide, losigamone, pharmacokinetics, pregabalin, remacemide, retigabine, rufinamide, safinamide, seletracetam, soretolide, stiripentol, talampanel, valrocemide