Short communication

Isobolographic analysis of interactions among losigamone analog AO-620 and two conventional antiepileptic drugs

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Abstract:
In the present study, we investigated pharmacodynamic interactions among AO-620, a losigamone analog, and two conventional antiepileptic drugs, valproate (VPA) and phenobarbital (PB). Experiments were conducted in the maximal electroshock test in mice. Isobolographic analysis of the obtained data revealed pure additive interactions between AO-620 and PB applied at three dose ratios of 1:1, 1:3 and 3:1. Antagonism was observed when AO-620 was co-administered with VPA at the ratio of 3:1, while additive interactions were seen in two remaining proportions (1:3 and 1:1). Surprisingly, the interaction pattern of AO-620 appeared quite different from that of losigamone.

Key words: AO-620, antiepileptic drugs, isobolographic analysis, maximal electroshock