SIGMA₁ RECEPTOR ANTAGONISTS ATTENUATE ANTIDEPRESSANT-LIKE EFFECT INDUCED BY CO-ADMINISTRATION OF 1,3 DI-o-TOLYL GUANIDINE (DTG) AND MEMANTINE IN THE FORCED SWIMMING TEST IN RATS

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Sigma₁ receptor antagonists attenuate antidepressant-like effect induced by co-administration of 1,3 di-o-tolylguanidine (DTG) and memantine in the forced swimming test in rats. G. SKUZA, Z. ROGÓŻ. Pol. J. Pharmacol., 2003, 55, 1149–1152.

The obtained results show that DTG, the σ₁/σ₂ receptor agonist, exerts a synergistic effect with memantine, an uncompetitive NMDA receptor antagonist, in the forced swimming test in rats, and that progesterone and BD 1047, the σ₁ receptor antagonists, counteract this effect. The results suggest that the σ₁ receptor subtype may contribute to the behavioral response induced by combined administration of DTG and memantine in Porsolt’s test in rats.

Key words: sigma ligands, DTG, memantine, synergistic effect, progesterone, BD 1047, forced swimming test, rats

# correspondence