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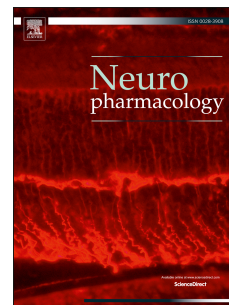
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The 5-HT₃ receptor antagonist ondansetron potentiates the effects of the acetylcholinesterase inhibitor donepezil on neuronal network oscillations in the rat dorsal hippocampus

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Declarations of interest: none

Chemical compounds studied in this article:

Donepezil (PubChem CID 3152)

Ondansetron (PubChem CID 4595)

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Alzheimer's disease

Abbreviations:

5-HT, 5-hydroxytryptamine (serotonin); 5-HT₃ receptor, 5-hydroxytryptamine 3 receptor; 5-HT₆ receptor, 5-hydroxytryptamine 6 receptor; Aβ, Amyloid-beta; ACh, Acetylcholine; AChEI, Acetylcholinesterase inhibitor; AD, Alzheimer's disease; ANOVA, Analysis of variance; AP, Anterior-posterior; AUC, Area under the curve; CB, Calbindin; CCK, Cholecystokinin; CR, Calretinin; DPZ, Donepezil; DV, Dorsal-ventral; EEG, Electroencephalography; GABA, Gamma-aminobutyric acid; GLU, Glucose; hf, Hippocampal fissure; I/O, Input/output; i.p., Intraperitoneal; i.v., Intravenous; LFP, Local field potential; mAChR, Muscarinic acetylcholine receptor; m-CPBG, 1-(m-chlorophenyl)-biguanide; MI, Modulation index; ML, Medial-lateral; MS/MS, Tandem mass spectrometry; MS/vDBB, Medial septum/vertical limb of the diagonal band of Broca; m/z, Mass to charge ratio; nAChR, Nicotinic acetylcholine receptor; NMDA, N-methyl-D-aspartate; OND, Ondansetron; PPT, Pedunculopontine tegmental nucleus; PV+, Parvalbumin-positive; SEM, Standard error of means; UPLC, Ultra performance liquid chromatography; VEH, Vehicle

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