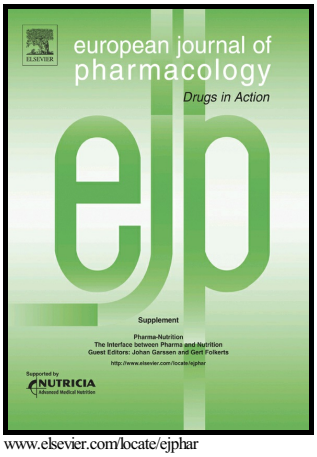

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Dose-dependent effects of adenosine antagonists on tacrine-induced tremulous jaw movements

Joel A. Johnson[1], Aaron P. Montgomery, Eric R. Starr[2], Justin Ludwig, Jennifer Trevitt*

California State University, Fullerton, Department of Psychology, 800 N. State College Blvd., Fullerton, CA 92831, United States of America

joelaj@uci.edu
AMontgomery@csu.fullerton.edu
Eric.Starr@rockets.utoledo.edu
jludwig@csu.fullerton.edu
jtrevitt@fullerton.edu

*Corresponding Author: Jennifer Trevitt, jtrevitt@fullerton.edu

ABSTRACT

The present study examines the effect of three adenosine receptor antagonists on tremulous jaw movements (TJMs), an animal model of tremor. Forty-five rats were pre-treated with one adenosine antagonist: caffeine (0.0, 5.0, or 10.0 mg/kg; non-selective adenosine receptor antagonist), 8-cyclopentyltheophylline (CPT; 0.0, 5.0, or 10.0 mg/kg; selective adenosine A_1 receptor antagonist), or SCH 58261 (0.0 or 8.0 mg/kg; selective adenosine A_{2A} receptor antagonist) followed by TJM induction with tacrine (0.0, 0.75, or 2.5 mg/kg; acetylcholinesterase inhibitor). CPT and SCH 58261 both significantly reduced TJMs while caffeine did not. Unexpectedly, both SCH 58261 and CPT reduced

[1] Present Addresses: University of California at Irvine School of Medicine, 836 Health Sciences Rd., Irvine, CA 92697

[2] Present Addresses: National Institute of Health, 9000 Rockville Pike, Bethesda, MD 20892