

Author's Accepted Manuscript

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

Joel A. Johnson, Aaron P. Montgomery, Eric R.
Starr, Justin Ludwig, Jennifer Trevitt



PII: S0014-2999(18)30321-2
DOI: <https://doi.org/10.1016/j.ejphar.2018.06.004>
Reference: EJP71834

To appear in: *European Journal of Pharmacology*

Received date: 1 September 2017
Revised date: 4 June 2018
Accepted date: 5 June 2018

Cite this article as: Joel A. Johnson, Aaron P. Montgomery, Eric R. Starr, Justin Ludwig and Jennifer Trevitt, Dose-dependent effects of adenosine antagonists on tacrine-induced tremulous jaw movements, *European Journal of Pharmacology*, <https://doi.org/10.1016/j.ejphar.2018.06.004>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

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

Joel A. Johnson¹, Aaron P. Montgomery, Eric R. Starr², 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 A₁ 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

Download English Version:

<https://daneshyari.com/en/article/8528963>

Download Persian Version:

<https://daneshyari.com/article/8528963>

[Daneshyari.com](https://daneshyari.com)