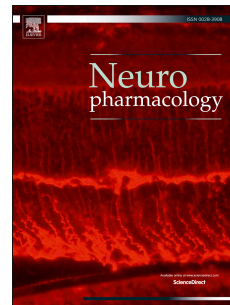


Accepted Manuscript

Glucagon-like peptide-1 mediates effects of oral galactose in streptozotocin-induced rat model of sporadic Alzheimer's disease

Ana Knezovic, Jelena Osmanovic Barilar, Ana Babic, Robert Bagaric, Vladimir Farkas, Peter Riederer, Melita Salkovic-Petrisic



PII: S0028-3908(18)30093-5

DOI: [10.1016/j.neuropharm.2018.02.027](https://doi.org/10.1016/j.neuropharm.2018.02.027)

Reference: NP 7095

To appear in: *Neuropharmacology*

Received Date: 20 October 2017

Revised Date: 29 January 2018

Accepted Date: 24 February 2018

Please cite this article as: Knezovic, A., Barilar, J.O., Babic, A., Bagaric, R., Farkas, V., Riederer, P., Salkovic-Petrisic, M., Glucagon-like peptide-1 mediates effects of oral galactose in streptozotocin-induced rat model of sporadic Alzheimer's disease, *Neuropharmacology* (2018), doi: 10.1016/j.neuropharm.2018.02.027.

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 proof before it is published in its final 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.

GLUCAGON-LIKE PEPTIDE-1 MEDIATES EFFECTS OF ORAL GALACTOSE IN STREPTOZOTOCIN-INDUCED RAT MODEL OF SPORADIC ALZHEIMER'S DISEASE

Ana Knezovic^{1#}, Jelena Osmanovic Barilar^{1#}, Ana Babic¹, Robert Bagaric², Vladimir Farkas², Peter Riederer³, Melita Salkovic-Petrisic^{1,4*}

[#]Knezovic A. and Osmanovic Barilar J. equally contributed as first authors of the paper

¹Department of Pharmacology, University of Zagreb School of Medicine, Salata 11, HR-10 000 Zagreb, Croatia

²Department of Experimental Physics, Rudjer Boskovic Institute, Bijenicka 54, HR-10 000 Zagreb

³Centre of Mental Health, Department of Psychiatry, Psychosomatics and Psychotherapy, University Hospital, Würzburg, Fuchsleinstrasse 15, 97080 Würzburg, Germany

⁴Research Centre of Excellence for Fundamental Clinical and Translational Neuroscience, Croatian Institute for Brain Research, University of Zagreb School of Medicine, Salata 12, HR-10 000 Zagreb, Croatia

This paper is dedicated to the memory of Professor Werner Reutter, whose scientific curiosity and expertise in galactose research initiated our collaboration on the preliminary research of the beneficial effects of oral galactose treatment.

*Corresponding author: Salkovic-Petrisic Melita
Department of Pharmacology
University of Zagreb School of Medicine
Salata 11, HR-10 000 Zagreb
Croatia
Phone: +385 1 4590 219
e-mail: melitas@mef.hr

APP, amyloid precursor protein; ATP, adenosine triphosphate; A β 1-42, amyloid β 1-42; CMRgl, cerebral metabolic rate for glucose; CNS, central nervous system; CSF, cerebrospinal fluid; CTR, control; CTX, cortex; DPP-IV, dipeptidyl peptidase IV; FDG, fluorodeoxyglucose; GIP, gastric inhibitory polypeptide; GLP-1, glucagon like peptide-1; GLP-1R, glucagon like peptide-1 receptor; GLUT, glucose transporter; HPC, hippocampus; icv, intracerebroventricular; ip, intraperitoneal; MWM, Morris Water Maze Test; PA, Passive Avoidance Test; PET, positron emission tomography; po, per oral; PS1, presenilin 1; sAD, sporadic Alzheimer's disease; SGLT, sodium glucose cotransporter; STZ, streptozotocin

Download English Version:

<https://daneshyari.com/en/article/8516653>

Download Persian Version:

<https://daneshyari.com/article/8516653>

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