

Accepted Manuscript

Research report

Age-dependent effects of dimethyl fumarate on cognitive and neuropathological features in the streptozotocin-induced rat model of Alzheimer's disease

Irena Majkutewicz, Ewelina Kurowska, Magdalena Podlacha, Dorota Myślińska, Beata Grembecka, Jan Ruciński, Karolina Pierzynowska, Danuta Wrona

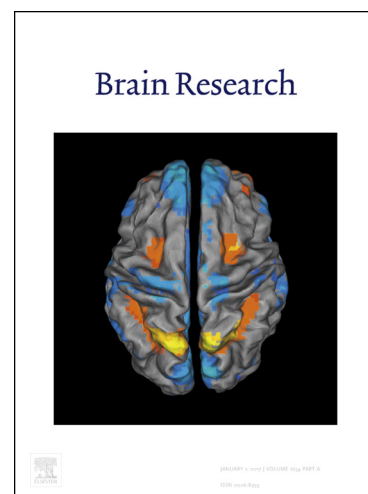
PII: S0006-8993(18)30080-5
DOI: <https://doi.org/10.1016/j.brainres.2018.02.016>
Reference: BRES 45670

To appear in: *Brain Research*

Received Date: 23 September 2017
Revised Date: 29 January 2018
Accepted Date: 12 February 2018

Please cite this article as: I. Majkutewicz, E. Kurowska, M. Podlacha, D. Myślińska, B. Grembecka, J. Ruciński, K. Pierzynowska, D. Wrona, Age-dependent effects of dimethyl fumarate on cognitive and neuropathological features in the streptozotocin-induced rat model of Alzheimer's disease, *Brain Research* (2018), doi: <https://doi.org/10.1016/j.brainres.2018.02.016>

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.



**Age-dependent effects of dimethyl fumarate on cognitive and neuropathological features
in the streptozotocin-induced rat model of Alzheimer's disease**

Irena Majkutewicz*¹, Ewelina Kurowska¹, Magdalena Podlacha¹, Dorota Myślińska¹, Beata Grembecka¹, Jan Ruciński¹, Karolina Pierzynowska², Danuta Wrona¹.

¹Department of Animal and Human Physiology, Faculty of Biology, University of Gdańsk,
Wita Stwosza 59, 80-308 Gdańsk, Poland

²Department of Molecular Biology, Faculty of Biology, University of Gdańsk, Wita Stwosza
59, 80-308 Gdańsk, Poland

* Corresponding author: Irena Majkutewicz

Department of Animal and Human Physiology, Faculty of Biology, University of Gdańsk,
ul. Wita Stwosza 59,

80-308 Gdańsk, Poland

tel: +48(58) 523 61 21

fax: +48 (58) 523 61 21

e-mail: irena.majkutewicz@biol.ug.edu.pl

Key words: dimethyl fumarate; memory disorder; streptozotocin; neurodegeneration;
microglia; Alzheimer's disease; age.

Highlights:

Dimethyl fumarate (DMF) has antioxidant and anti-inflammatory properties;

ICV Streptozotocin (STZ) evokes age-dependent memory impairment;

DMF stronger alleviates memory impairment and neurodegeneration in aged rats;

Beneficial effect of DMF can be realized by alleviation of microglia activation.

Download English Version:

<https://daneshyari.com/en/article/8839849>

Download Persian Version:

<https://daneshyari.com/article/8839849>

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