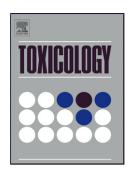
### Accepted Manuscript

Title: Ultrastructural and biochemical features of cerebral microvessels of adult rat subjected to a low dose of silver nanoparticles

Authors: Beata Dąbrowska-Bouta, Grzegorz Sulkowski, Małgorzata Frontczak-Baniewicz, Joanna Skalska, Mikołaj Sałek, Jolanta Orzelska-Górka, Lidia Strużyńska



PII:	S0300-483X(18)30121-5
DOI:	https://doi.org/10.1016/j.tox.2018.06.009
Reference:	TOX 52050
To appear in:	Toxicology
Received date:	8-1-2018
Revised date:	15-6-2018
Accepted date:	19-6-2018

Please cite this article as: Dabrowska-Bouta B, Sulkowski G, Frontczak-Baniewicz M, Skalska J, Sałek M, Orzelska-Górka J, Strużyńska L, Ultrastructural and biochemical features of cerebral microvessels of adult rat subjected to a low dose of silver nanoparticles, *Toxicology* (2018), https://doi.org/10.1016/j.tox.2018.06.009

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.

### ACCEPTED MANUSCRIPT

# Ultrastructural and biochemical features of cerebral microvessels of adult rat subjected to a low dose of silver nanoparticles.

Beata Dąbrowska-Bouta<sup>1a</sup>, Grzegorz Sulkowski<sup>1a</sup>, Małgorzata Frontczak-Baniewicz<sup>3</sup>, Joanna Skalska<sup>1</sup>, Mikołaj Sałek<sup>1</sup>, Jolanta Orzelska-Górka<sup>2</sup>, Lidia Strużyńska<sup>1</sup>.

<sup>1</sup>Laboratory of Pathoneurochemistry, Department of Neurochemistry, Mossakowski Medical Research Centre, Polish Academy of Sciences, 5 Pawińskiego str., 02-106 Warsaw, Poland <sup>2</sup>Department of Pharmacology and Pharmacodynamics, Medical University of Lublin, 4a Chodźki str., 20-093 Lublin, Poland <sup>3</sup>Electron Microscopy Platform, Mossakowski Medical Research Centre, Polish Academy of Sciences, 5 Pawińskiego str., 02-106 Warsaw, Poland.

a -equally contributing authors

\* Corresponding author: Lidia Strużyńska, PhD,
Laboratory of Pathoneurochemistry,
Department of Neurochemistry,
Mossakowski Medical Research Centre,
Polish Academy of Sciences,
5 Pawińskiego str., 02-106 Warsaw, Poland.
E-mail: <u>lidkas@imdik.pan.pl</u>

#### Abstract

The widespread use of silver nanoparticles (AgNPs) in medicine and in multiple commercial products has motivated researchers to investigate their potentially hazardous effects in organisms. Since AgNPs may easily enter the brain through the blood-brain barrier (BBB), characterization of their interactions with cellular components of the neurovascular unit (NVU) is of particular importance. Therefore, in an animal model of prolonged low-dose exposure, we investigate the extent and mechanisms of influence of AgNPs on cerebral microvessels. Adult rats were treated orally with small (10 nm) AgNPs in a dose of 0.2 mg/kg b.w. over a 2-week period. A silver citrate-exposed group was established as a positive

Download English Version:

## https://daneshyari.com/en/article/8552713

Download Persian Version:

## https://daneshyari.com/article/8552713

Daneshyari.com