# Accepted Manuscript

Title: Association of exposure to manganese and iron with striatal and thalamic GABA and other neurometabolites — Neuroimaging results from the WELDOX II study

Authors: Swaantje Casjens, Urike Dydak, Shalmali Dharmadhikari, Anne Lotz, Martin Lehnert, Clara Quetscher, Christoph Stewig, Benjamin Glaubitz, Tobias Schmidt-Wilcke, David Edmondson, Chien-Lin Yeh, Tobias Weiss, Christoph van Thriel, Lennard Herrmann, Siegfried Muhlack, Dirk Woitalla, Michael Aschner, Thomas Brüning, Beate Pesch



PII: S0161-813X(17)30165-1

DOI: http://dx.doi.org/doi:10.1016/j.neuro.2017.08.004

Reference: NEUTOX 2227

To appear in: *NEUTOX* 

Received date: 27-4-2017 Revised date: 24-7-2017 Accepted date: 7-8-2017

Please cite this article as: Casjens Swaantje, Dydak Urike, Dharmadhikari Shalmali, Lotz Anne, Lehnert Martin, Quetscher Clara, Stewig Christoph, Glaubitz Benjamin, Schmidt-Wilcke Tobias, Edmondson David, Yeh Chien-Lin, Weiss Tobias, Thriel Christoph van, Herrmann Lennard, Muhlack Siegfried, Woitalla Dirk, Aschner Michael, Brüning Thomas, Pesch Beate. Association of exposure to manganese and iron with striatal and thalamic GABA and other neurometabolites — Neuroimaging results from the WELDOX II study. *Neurotoxicology* http://dx.doi.org/10.1016/j.neuro.2017.08.004

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 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

Association of exposure to manganese and iron with striatal and thalamic GABA and other neurometabolites – neuroimaging results from the WELDOX II study

Swaantje Casjens<sup>a</sup>, Urike Dydak<sup>b,c</sup>, Shalmali Dharmadhikari<sup>b,c</sup>, Anne Lotz<sup>a</sup>, Martin Lehnert<sup>a</sup>, Clara Quetscher<sup>a</sup>, Christoph Stewig<sup>a</sup>, Benjamin Glaubitz<sup>d</sup>, Tobias Schmidt-Wilcke<sup>d,e</sup>, David Edmondson<sup>b,c</sup> Chien-Lin Yeh<sup>b,c</sup>, Tobias Weiss<sup>a</sup>, Christoph van Thriel<sup>f</sup>, Lennard Herrmann<sup>g</sup>, Siegfried Muhlack<sup>g</sup>, Dirk Woitalla<sup>g</sup>, Michael Aschner<sup>h</sup>, Thomas Brüning<sup>a,\*</sup> Beate Pesch<sup>a,\*</sup>

<sup>a</sup>Institute for Prevention and Occupational Medicine of the German Social Accident Insurance, Institute of the Ruhr-Universität Bochum (IPA), Bochum, Germany

<sup>b</sup>School of Health Sciences, Purdue University, West Lafayette, IN, USA

<sup>c</sup>Department of Radiology and Imaging Sciences, Indiana University School of Medicine, Indianapolis, IN, USA

<sup>d</sup>Department of Neurology, BG University Hospital Bergmannsheil, Ruhr-Universität Bochum, Bochum, Germany

<sup>e</sup>Institute of Clinical Neuroscience and Medical Psychology, University of Düsseldorf, Düsseldorf, Germany <sup>f</sup>Leibniz Research Centre for Working Environment and Human Factors (IfADo), Dortmund, Germany

<sup>9</sup>Department of Neurology, Sankt Josef Hospital, Bochum, Germany

<sup>h</sup>Department of Molecular Pharmacology, Albert Einstein College of Medicine, New York, NY, USA

\*equally contributed

## Corresponding author:

Swaantje Casjens, PhD

Institute for Prevention and Occupational Medicine of the German Social Accident Insurance, Institute of the Ruhr-Universität Bochum (IPA)

Bürkle-de-la-Camp-Platz 1

44789 Bochum

Germany

Tel: +49-234-302 4592, e-mail: casjens@ipa-dguv.de

#### **Highlights**

## Download English Version:

# https://daneshyari.com/en/article/8550324

Download Persian Version:

https://daneshyari.com/article/8550324

Daneshyari.com