# Accepted Manuscript

Title: Beyond good and evil: a putative continuum-sorting hypothesis for the functional role of proBDNF/BDNF-propeptide/mBDNF in antidepressant treatment

Authors: Cassiano R.A.F. Diniz, Plinio C Casarotto, Leonardo Resstel, Sâmia R.L. Joca

PII: S0149-7634(17)30959-4

DOI: https://doi.org/10.1016/j.neubiorev.2018.04.001

Reference: NBR 3088

To appear in:

Received date: 20-12-2017 Revised date: 13-3-2018 Accepted date: 3-4-2018

Please cite this article as: Diniz CRAF, Casarotto PC, Resstel L, Sâmia RLJ, Beyond good and evil: a putative continuum-sorting hypothesis for the functional role of proBDNF/BDNF-propeptide/mBDNF in antidepressant treatment, *Neuroscience and Biobehavioral Reviews* (2010), https://doi.org/10.1016/j.neubiorev.2018.04.001

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.



Beyond good and evil: a putative continuum-sorting hypothesis for the functional role of proBDNF/BDNF-propeptide/mBDNF in antidepressant treatment

Cassiano R. A. F. Diniz<sup>a,c\*</sup>, Plinio C Casarotto a,b, Leonardo Resstela and Sâmia R.L. Joca<sup>a,c,d</sup>

<sup>a</sup>School of Medicine, Campus USP, Ribeirão Preto, SP 14049-900, Brazil.

<sup>b</sup>Neuroscience Center - HILife, University of Helsinki, Finland.

<sup>c</sup>Department of Physics and Chemistry, School of Pharmaceutical Sciences of Ribeirão Preto, Campus USP, Ribeirão Preto, SP 14040-904, Brazil.

<sup>d</sup>Translational Neuropsychiatry Unit, Department of Clinical Medicine, Aarhus University, Denmark

\*Corresponding Author: Cassiano R. A. F. Diniz. School of Medicine of Ribeirão Preto (FMRP) University of São Paulo (USP). Av. Bandeirantes, N 3900, 14049-900, Ribeirão Preto - SP, Brazil. Phone: +55-16-36024705 -Fax: +55-16-36024880. e-mail: crafd87@gmail.com

### **Highlights**

- Stress and antidepressants modulate brain neuroplasticity and BDNF levels
- BDNF production is tied to previous proBDNF making
- Binary sorting hypothesis proposes BDNF/proBDNF balance as crucial to neuroremodeling
- Neuronal remodeling is necessary for antidepressant effects on anxiety and depression

#### **Abstract**

Depression and posttraumatic stress disorder are assumed to be maladaptive responses to stress and antidepressants are thought to counteract such responses by increasing BDNF (brain-derived

## Download English Version:

# https://daneshyari.com/en/article/7301720

Download Persian Version:

https://daneshyari.com/article/7301720

<u>Daneshyari.com</u>