

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Psychiatry

ESPS manuscript NO: 22436

Title: Are the changes in the peripheral brain-derived neurotrophic factor levels due to platelet activation?

Reviewer's code: 02456929

Reviewer's country: Mexico

Science editor: Jin-Xin Kong

Date sent for review: 2015-09-04 13:28

Date reviewed: 2015-09-04 23:35

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

Title: are the changes in the peripheral BDNF levels due to platelet activation? The author carried a review in the literature for analyzed studies that evaluated the relationship between BDNF and platelet activation. Very interesting review. In my opinion this could be of interest for the journal and your readers. However the author should modify the manuscript according to the following suggestions: General: Consistency between the title of the manuscript, the objectives and the conclusion of his interesting review. I understand that this report not was a systematic report. However, for the reproducibility is recommended that the author gave a date of the last literature searches Title: This could identify the manuscript as a review. Conclusion: This section could answer the title question.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Psychiatry

ESPS manuscript NO: 22436

Title: Are the changes in the peripheral brain-derived neurotrophic factor levels due to platelet activation?

Reviewer's code: 02445328

Reviewer's country: Turkey

Science editor: Jin-Xin Kong

Date sent for review: 2015-09-04 13:28

Date reviewed: 2015-09-06 20:31

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

This is a very detailed review on "peripheral BDNF levels and platelet activation". Although it gets harder for a clinician to follow the whole manuscript, as a investigator in the field I enjoyed reading it. But I am not sure every other investigator would have the appetite as mine. Therefore, I suggest to shorten the manuscript and add few figures for a better understanding. There are few typo mistakes like in the first sentence in the core tip. Page numbers are missing Under the section of human studies and chronic antidepressants (it would be better "chronic antidepressant use): the second half of the paragraph is not understood well.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Psychiatry

ESPS manuscript NO: 22436

Title: Are the changes in the peripheral brain-derived neurotrophic factor levels due to platelet activation?

Reviewer's code: 00504963

Reviewer's country: Japan

Science editor: Jin-Xin Kong

Date sent for review: 2015-09-04 13:28

Date reviewed: 2015-09-17 15:34

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input type="checkbox"/> No	

COMMENTS TO AUTHORS

This is a very interesting review article addressing the relationship between peripheral BDNF levels and platelet activation. The topic is important because altered levels of blood (serum/plasma) BDNF have been repeatedly reported in depressive disorder and the role of platelets, which release a substantial proportion of peripheral BDNF, is unclear in the pathophysiology of the illness. The author has made a great effort in the literature search and addressed an adequately wide range of related issues. Major comments: 1. In the CORRELATIONS BETWEEN THE CEREBRAL AND PERIPHERAL BDNF LEVELS section, the authors wrote that BDNF crosses the blood-brain barrier [92] (L1P14). However, to the reviewer's knowledge, BDNF has not generally been considered to cross the BBB according to Pardridge (Drug Discov Today 12: 54-61, 2007; Pardridge et al Pharm Res 15: 576-582, 1998). These contradictory findings should be both presented and clarified. 2. The Fibrinogen section (P16) is too thin. Recent studies have reported strong associations between increased fibrinogen levels (blood and CSF) and depression, Wium-Andersen et al Mol Psychiatry 2012;18:854-855 for blood and Hattori et al Sci Rep. 2015; 5: 11412 for CSF, for example. The authors

should cite such articles and discuss more about the possible link between, fibrinogen, BDNF, and platelets in the illness. 3. The authors should provide a figure illustrating the possible molecular mechanisms underlying the link between BDNF and other secreted molecules from platelets and depression, which will be of substantial help for readers to understand the article. Minor comments 1. In the abstract, the authors describe that secreted BDNF represents 30% of the total BDNF. What is "the total BDNF"? Total BDNF in the peripheral blood or total BDNF in platelets? 2. References should be given to the 1st and 2nd sentences of the introduction (concerning 2.5% of the general population and the 2nd highest burden). 3. The authors should describe for what agonist did they mean? (L16P7) 4. L17P9: "CD62P" should be "P-selection (CD 62-p)" to be in accordance with the later description in the "P-selectin" section on page16? The description of the same molecule should be the same throughout the manuscript. 5. The following sentence in the last paragraph on page 12 is redundant and can be deleted; Platelets constitute a source of the peripheral BDNF concentrations. 6. The authors wrote; The BDNF stored in platelets is likely derived from both the circulating plasma pool and from the resident cells in the brain or other organs (L1P14). However, the authors suggest the possibility of pass down from megakaryocytes on page 8. These descriptions are contradictory and confusing. 7. In the beta-TG section (P17), the authors wrote; In contrast, the BDNF and plasma beta-TG values were not significantly correlated. It seems that this sentence should be changed to; In contrast, the plasma BDNF and beta-TG values were not significantly correlated. 8. In the TNF-a section (P18), the descriptions are unclear. In the 1st sentence, how is BDNF linked to release of proinflammatory cytokines? Does cytokines inhibit or enhance BDNF? In the 2nd sentence, how was serum BDNF significantly associated with serum TNF? Furthermore, the last two sentences of the section seem to be contradictory and confusing. 9. The description of the 1st paragraph of the "animal studies and single dose of an antidepressant" (P19) is rather confusing. The statement "there were no differences between the effects of serotonin-norepinephrine reuptake inhibitors (SNRIs) and selective serotonin re-uptake inhibitors (SSRIs)" and that of "the changes in BDNF release depend on the type and amount of the antidepressant" seem to be contradictory. The authors should correct these points to be clear. 10. Typos / grammatical errors 1) In Core tip: no neuronal -> non-neuronal; Depression disorders -> Depressive disorders 2