

## ESPS Peer-review Report

**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 9039

**Title:** Glutamine prevents oxidative stress in ischemia-reperfusion

**Reviewer code:** 02445036

**Science editor:** Ma, Ya-Juan

**Date sent for review:** 2014-01-17 18:42

**Date reviewed:** 2014-01-29 20:16

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" 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"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

This is an interesting article studying how the pretreatment with glutamine prevents mucosal injury and improves gut and lung recovery after I/R injury in a rat model. The manuscript includes six clear figures. This research is easy to follow and finds some valuable information for scientific community interested in both glutamine and ischemia/reperfusion, as well as in oxidative damage and ROS. To date, this is the first investigation to study glutamine effect on NF- $\kappa$ B and IL-6, as well as in SOD and TBARS in a model of mesenteric ischemia/reperfusion. However, there are some items that must be considered concerning with the publication of the present manuscript:

- ? Page 4, paragraph 3, line 4: after "... (I/R) event" add some cite to state this sentence, i.e.: S?zen S, Kisak?rek M, Yildiz F, G?n?lta? M, Din?el AS. The effects of glutamine on hepatic ischemia reperfusion injury in rats. Hippokratia. 2011 Apr;15(2):161-6.
- ? Page 4, paragraph 3, line 11: after "...in oxidative stress" add some cite to following this sentence, i.e.: Mat?s JM, Segura JA, Alonso FJ, M?rquez J. Natural antioxidants: therapeutic prospects for cancer and neurological diseases. Mini Rev Med Chem. 2009 Sep;9(10):1202-14.
- ? Page 5, last paragraph: please be aware of font size.
- ? Page 6, first paragraph: please be aware of font size.
- ? Page 6, second paragraph, lines 8: following "...peripheral blood", please introduce a new reference, i.e.: M?rquez J, Tosina M, de la Rosa V, Segura JA, Alonso FJ, Mat?s JM, Campos-Sandoval JA. New insights into brain glutaminases: beyond their role on glutamatergic transmission. Neurochem Int. 2009 Jul-Aug;55(1-3):64-70.
- ? Page 6, last line, following "...glutamate", please cite again the same reference by M?rquez et al.
- ? Page 7, first paragraph, line 4, after "...oxidative stress": please add some cite to clarify this phrase, i.e.: Esposito E, Mondello S, Di Paola R, Mazzon E, Italiano D, Paterniti I, Mondello P, Aloisi C, Cuzzocrea S. Glutamine contributes to ameliorate inflammation after renal ischemia/reperfusion injury in rats. Naunyn

Schmiedebergs Arch Pharmacol. 2011 May;383(5):493-508. ? Page 9, “SOD activity”, and “Evaluation of NF- $\kappa$ B and IL-6” subheadings: please be aware of font size. ? Page 11, Data analysis section: please be aware of font size. ? Page 12: please be aware of font size. ? Page 13, paragraph 2, line 12: (5) instead of (6). ? Page 13, discussion: as glutamine is glutathione precursor, and glutathione is the main non enzymatic cellular antioxidant, some references must be used to explain this information, i.e.: Yamamoto S, Watanabe B, Hiratake J, Tanaka R, Ohkita M, Matsumura Y. Preventive effect of GGsTop, a novel and selective  $\gamma$ -glutamyl transpeptidase inhibitor, on ischemia/reperfusion-induced renal injury in rats. J Pharmacol Exp Ther. 2011 Dec;339(3):945-51; Gouvêa Junior VT, Caporossi C, Salomão AB, Cortes E, Munhoz MF, Nascimento JE. Effect of glutamine on the total antioxidant system of rats subjected to renal ischemia and reperfusion. Acta Cir Bras. 2011 Dec;26(6):445-50. ? Page 14: please abbreviate acute liver injury (ALI). ? Page 20, figure legends: be aware of font size. Please IL-6 must not be in bold face. ? Pages 21-22: Figures 1 & 2, please define abbreviation for SO. Please indicate that Gut is panel A, and Lung is panel B. ? Page 23 & 25: Figures 3 & 5, please define abbreviation for SO.