

ANSWERING REVIEWERS



March 10, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 8931-review.doc).

Title: Enteric glial cells and their role in the intestinal epithelial barrier

Author: Yan-Bo Yu, Yan-Qing Li

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 8931

The manuscript has been improved according to the suggestions of reviewers:

1 The anatomy of enteric glia should be well described as they are not just on mucosal glial plexus.

We have them on ENS and submucosal plexus which are also involved in barrier function.

Thanks for your kind suggestion. Following your suggestion, we have added more descriptions of the anatomy of enteric glia in our revised manuscript. And the enteric glia on submucosal plexus and myenteric plexus are well described. For a better understanding, a diagram showing enteric glia and their interaction with intestinal barrier/epithelium are also added in our revised manuscript (See Fig. 1 in our revised manuscript).

2 Original studies in the field should be well covered. My brief search showed that the following articles were not cited: 1: Cheadle GA, Costantini TW, Lopez N, Bansal V, Eliceiri BP, Coimbra R. Enteric glia cells attenuate cytomix-induced intestinal epithelial barrier breakdown. PLoS One. 2013 Jul 1;8(7):e69042. doi: 10.1371/journal.pone.0069042. 2: Xiao WD, Chen W, Sun LH, Wang WS, Zhou SW, Yang H. The protective effect of enteric glial cells on intestinal epithelial barrier function is enhanced by inhibiting inducible nitric oxide synthase activity under lipopolysaccharide stimulation. Mol Cell Neurosci. 2011 Feb;46(2):527-34. 3: Costantini TW, Krzyzaniak M, Cheadle GA, Putnam JG, Hageny AM, Lopez N, Eliceiri BP, Bansal V, Coimbra R. Targeting α -7 nicotinic acetylcholine receptor in the enteric nervous system: a cholinergic agonist prevents gut barrier failure after severe burn injury. Am J Pathol. 2012 Aug;181(2):478-86. 4: Costantini TW, Bansal V, Krzyzaniak M, Putnam JG, Peterson CY, Loomis

WH, Wolf P, Baird A, Eliceiri BP, Coimbra R. Vagal nerve stimulation protects against burn-induced intestinal injury through activation of enteric glia cells. *Am J Physiol Gastrointest Liver Physiol*. 2010 Dec;299(6):G1308-18.

We are sorry for the omission of some original studies in our review and we really appreciate your valuable suggestions. The above four studies you mentioned have been well described and cited in our revised manuscript.

3 Enteric glia and colitis should be discussed more.

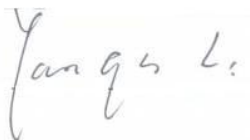
Thank you very much for your valuable suggestion. We have studied the published researches about the enteric glia and colitis. And another 4 representative studies about the role of enteric glia on colitis have been added in our revised manuscript.

4. A diagram showing enteric glia and their interaction with intestinal barrier/epithelium would add to this paper.

We appreciate your valuable suggestion. A diagram showing enteric glia and their interaction with intestinal barrier/epithelium has been added in our revised manuscript (See Fig. 1 in our revised manuscript).

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Yan-Qing Li'.

Yan-Qing Li, M.D. Ph.D.

Department of Gastroenterology,

Qilu Hospital, Shandong University,

Jinan 250012, P.R. China

E-mail: liyanqing@sdu.edu.cn

Tel: +86-531-82166012;

Fax: +86-531-82166012