

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

Ms: 1416

Title: Roles of BN52021 in platelet-activating factor pathway in inflammatory MS1 cells

Reviewer code: 00504522

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2012-12-10 16:22

Date reviewed: 2013-04-10 06:13

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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 checked="" 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

COMMENTS TO AUTHORS:

This article attempts to elucidate the protective role of BN-52021 against LPS-induced apoptosis and necrosis of a pancreatic islet endothelial cell line. PAF is a crucial mediator of acute pancreatitis, therefore the inhibition of its actions by drugs or phytochemicals, such as BN-52021, is interesting from a pharmaceutical point of view. Since BN-52021 is a well established antagonist of PAF receptor (PAFR) the authors investigated its effect on certain members of the signal transduction pathways initiated by PAFR activation. Specifically, the authors focused on the transcriptional modulation of adenylate cyclase, PLA2, PLC β , PTK, p38 MAPK and GRK along with the modulation of their final protein levels. The results are novel and interesting however some point need further clarification. Major comments: 1. The authors should explain in the discussion section the rationale behind their choice to study the specific signaling molecules. 2. The authors should discuss in more depth the protective effect of BN-52021. For example, it is known that PAFR is also able to interact with components of the bacterial wall, such as lipopolysaccharides [Nakamura, M., Honda, Z., Waga, I., Matsumoto, T., Noma, M., and Shimizu, T. 1992, FEBS Lett., 314, 125.] and phosphorylcholine [Fillon, S., Soulis, K., Rajasekaran, S., Benedict-Hamilton, H., Radin, J.N., Orihuela, C.J., El Kasmi, K.C., Murti, G., Kaushal, D.,



Baishideng Publishing Group Co., Limited

Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

Gaber, M.W., Weber, J.R., Murray, P.J., and Tuomanen, E.I. 2006, J. Immunol., 177, 6182]. Do the authors believe that the protective effect of BN-52021 is due to the antagonism of LPS binding to PAFR or due to the prevention of PAF binding to its receptor. If the second is true is LPS able to induce the production of PAF in MS1 cells. Finally, if PAF is produced by the action of LPS on MS1 cells, does it exert autacoids actions on them or it remains inside cells ? 3. It is not very clear why the authors used LPS+DMSO for their experiments. Is DMSO the solvent of BN-52021 ? 4. Paragraph 3.2: The authors pretreated the cells for 20 min with BN-52021. How did they end with this incubation time ? Did they tried other incubation times ? 5. Paragraph 3.2 and Figure 2: The concentration of 50 mM BN-52021 was used for the experiments. This is a huge concentration. Do the authors tested its toxicity to cells ? In addition, do the authors believe that such a concentration has clinical significance ? Finally, how do they explain reduction of BN-52021 inhibitory activity at higher concentrations (100 mM) ?

Minor comments

1. Figure 1. The authors should add the standard deviation bars in the charts
2. Figures 3 and 4: The legend of the third bar should be LPS+DMSO not DMSO alone.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

Ms: 1416

Title: Roles of BN52021 in platelet-activating factor pathway in inflammatory MS1 cells

Reviewer code: 02446789

Science editor: l.l.wen@wjgnet.com

Date sent for review: 2012-12-10 16:22

Date reviewed: 2013-04-15 04:59

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 checked="" 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 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

COMMENTS TO AUTHORS:

The manuscript entitled “Roles of BN52021 in platelet-activating factor pathway in inflammatory MS1 cells” by Shi-hai Xia……Wei Xu” is an interesting manuscript with novel observations. In this manuscript, authors delineated the effect and mechanism of BN52021, a compound extracted from Ginkgo biloba leaves with potent antagonistic effect on inflammatory platelet-activating factor pathway in MS1 mouse pancreatic islet endothelial cell line. The findings are straight forward and manuscript is well written and nicely discussed. However, few issues have to be resolved before the publication of this article in the World Journal of Gastroenterology. Major comment: Authors have used MTT colorimetric assay as a tool to analyze apoptosis and necrosis. This method is used for cell survival and is not appropriate for assessing apoptosis as cells with treatments do not always die. If they undergo senescence or cell cycle arrest, they do not proliferate but remain viable for the longer period of time. Authors need to perform caspase-3 activity assay in order to see the effect of BN52021 on apoptosis.