

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 26476

Title: Rhubarb extract partially improves mucosal integrity in chemotherapy-induced intestinal mucositis

Reviewer's code: 03308193

Reviewer's country: Brazil

Science editor: Ze-Mao Gong

Date sent for review: 2016-04-13 16:24

Date reviewed: 2016-04-25 20:34

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 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

In the present manuscript the authors aim at investigating the effects of orally gavaged aqueous rhubarb extract on 5-Fluorouracil-induced intestinal mucositis in rats. They suggest rhubarb extract (at a low dose) improves mucosal integrity and reduces ileal inflammation induced by 5-FU. The manuscript is well written and data are overall consistent. Major comments: - Is the phytochemical composition of the RE used in the present study known (tannin's percentage in the present batch, etc.)? This information is important so as to compare present data to other studies. This is part of quality control on studies involving herbal products. - Authors should introduce data on AQP first (it is Figure 1 here) or move figure on these data to the end on the manuscript. There's no problem to discuss these data before since it is a potential mechanism of action for RE very far from reality presented here (here data are mostly in rats), although very relevant to the literature. - "Cloned mammalian AQP 4 water channels ". It would be correct to mention "cloned rat AQP4 water channels". Authors mention "mammalian" in the figure and in the text, but in the material and methods section they clearly specify the use of a rat AQP4 cRNA, which is pretty logical. - Before

the experiment per se, how do the authors evaluate adequate expression and function of cloned rat AQP4 in the oocytes? This information is important. - The authors should have used a purified tannin or substance abundantly found in RE as a positive control in the AQP4 experiment. There's actually no positive control to evaluate viability and function of oocytes upon changes induced by osmotic gradients so as to be compared to RE in the present dataset. - "It is therefore plausible that the caloric index of HDR may have been contributing to the reduced appetite, yet maintenance of bodyweight in the rats receiving high dose RE. " Is this caloric index (numbers, percentage) known ? - "These results are consistent with previous studies which have exploited plant polysaccharides for their anti-inflammatory and antioxidant properties ". A plausible hypothesis although we do not know in the present study the phytochemical content of RE. Antioxydant effects might play a major role on the protection found by the authors, but this is greatly underestimated in the present manuscript. Neutrophil accumulation is likely to appear very quickly in response to alarmins (IL-33, IL-1-beta, chemokines) that will shortly follow ROS production within the mucosa. This inflammatory response is probably dumped by a rich antioxydant environment. However, we do not know how antioxydant RE is. Minor comments: - Introduction: Please provide an updated general reference on traditional herbal medicines on the treatment of a "wide variety of diseases and disorders", with a focus on cancer and cancer-chemotherapy side-effects. - Introduction: How AQPs are impacted during inflammation, mostly on the TGI? How will they lose function: before, during, after tissue damage is established? Are they downregulated upon inflammation? Are they linked to barrier stability, tight junctions, etc? Please enrich this section. - How were RE and 5-FU doses defined (previous work?) ? - How do the authors macroscopically define GIT sections to collect tissues for further analysis? With lesions and contraction of the GIT upon 5-FU treatment this macroscopic perspective might change. Please clarify.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 26476

Title: Rhubarb extract partially improves mucosal integrity in chemotherapy-induced intestinal mucositis

Reviewer's code: 02567627

Reviewer's country: France

Science editor: Ze-Mao Gong

Date sent for review: 2016-04-13 16:24

Date reviewed: 2016-06-12 21:26

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 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 checked="" 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 checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

Dear Authors Congratulations for your manuscripts. I gave some comments to the editor. My main question is about the composition of RE that you use, and the potentially active component. Regards