

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 32508

Title: In vitro and in vivo antioxidative and hepatoprotective activity of aqueous extract of Cortex Dictamni

Reviewer's code: 01568246

Reviewer's country: Norway

Science editor: Ya-Juan Ma

Date sent for review: 2017-01-12 10:38

Date reviewed: 2017-01-23 22:10

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

Herbs have been used to cure various diseases including hepatic injury. The purpose of the present study was to determine whether an aqueous extract of Cortex Dictamni (root bark) from Dictamnus dasycarpus Turcz shows antioxidant activity that might be used to protect liver. To evaluate the antioxidant activities of the aqueous extract of Cortex Dictamni (CDAE) were used both in vitro and in vivo approaches. The in vivo approach was to use rats with CCl₄- induced hepatotoxicity treated with or without DCAE. The manuscript is very well written. Both Abstract and Introduction give a good background for the reader to study the methods used and the results obtained. The Discussion brings the data obtained in context with earlier studies and presents an excellent analysis of the many methods used. The very thorough Discussion leads to a relatively reliable conclusion: CDAE exhibits a marked antioxidant activity and is effective for the prevention of CCl₄-induced hepatic damage in both sexes of the rats?. (And maybe for other types of hepatic damage as well). The following points should be dealt with: 1. Some of the results are presented in a superficial way. The data in Figure 1 are shown without any information about the incubation conditions. Medium, pH, temperature etc. 2.

Figure 3: It is not possible to see much details in the liver sections. Magnification should be much higher. 3. The legend to Figure 4A shows results for ?liver index? without any information about how the results are obtained and calculated. How is ?liver index? defined? 4. CDAE may protect the liver from CCl₄-induced damage through regulation of the Keap1-Nrf2- mediated antioxidant protein-expression. Western blot analysis in Figure 6 shows a very marked upregulation of Nrf2, HO-1, NQO1 y-GCSc. Again, there no information about the preparation of the protein extracts used in the western blots. Was the liver homogenized and centrifuged, and was the nuclear fraction used? 5. The chemical composition of CDAE (or parts of it) is presented in Materials and Methods and in Results. One would therefore expect that the authors would discuss, judged from the chemical structure of the extract, how the CDAE could act as an oxidant. Another interesting question is how CDAE acts to promote protein expression (Nrf2, HO-1 etc), or inhibit protein expression (CYP2E1). A short discussion of these issues may act as an introduction to further studies.

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Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 32508

Title: In vitro and in vivo antioxidative and hepatoprotective activity of aqueous extract of Cortex Dictamni

Reviewer's code: 00008233

Reviewer's country: Italy

Science editor: Ya-Juan Ma

Date sent for review: 2017-01-12 10:38

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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 checked="" type="checkbox"/> Plagiarism	<input checked="" 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 their study Li and colleagues analyzed the antioxidant activity of aqueous extract of Cortex Dictamni in vitro and in vivo in order to investigate the hepatoprotective effect of this extract. Authors suggest that this extract may exert antioxidant effect and may have hepatoprotective effect by performing many in vitro assay. The manuscript is well written and interesting. I would like suggest to Authors some improvements to complete the study. 1) Figure 3. Authors should increase magnification of histological images since it is for the reader difficult see clearly details of tissue in the liver sections; 2) Authors demonstrated the effect of CDAE on liver index, but they do not explain how they obtain this parameter neither in methods section or in the figure legend (figure 4); 3) In general, graph are too small; Authors should increase a little the size of them 4) Authors do not give information on method they obtained extracts for western blot analysis: they should explain in method section 5) The figure 9 should be renominated as figure 8, since figure 8 is not present in the manuscript