

**ESPS Peer-review Report**

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

**ESPS Manuscript NO:** 5279

**Title:** Cooperative inhibitory effect of sinomenine combined with 5-fluorouracil on esophageal carcinoma

**Reviewer code:** 00068809

**Science editor:** Cui, Xue-Mei

**Date sent for review:** 2013-08-27 15:39

**Date reviewed:** 2013-08-28 09:03

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 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 TO AUTHORS**

This is an original study which examined the inhibitive effects of sinomenine (SIN) combined with 5-fluorouracil (5-FU) on esophageal carcinoma Eca-109 cells in vitro and in vivo. The results show that combined effects of SIN and 5-FU on the growth of esophageal carcinoma is superior to the individual effects in vitro and in vivo, while side effects of chemotherapy are not increased. This study is important to enhance the effect and reduce the toxicity of chemotherapy regimens for patients with esophageal cancer. The study design is excellent. The study results are true, and the conclusion is reasonable. There are some minor grammatical errors, so minor language polishing is needed to improve its language quality. I would recommend it for publication in WJG after language improvement.

## ESPS Peer-review Report

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

**ESPS Manuscript NO:** 5279

**Title:** Cooperative inhibitory effect of sinomenine combined with 5-fluorouracil on esophageal carcinoma

**Reviewer code:** 00742250

**Science editor:** Cui, Xue-Mei

**Date sent for review:** 2013-08-27 15:39

**Date reviewed:** 2013-09-03 17:35

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 type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)		BPG Search:	
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

## COMMENTS TO AUTHORS

The result was very excellent that combination of SIN and 5-FU achieved inhibition rate of 91% as compared to the control. And tumor growth was significantly smaller in their combination than in SIN or 5-FU alone. The authors explained that anti-tumor effect of their combination is via a potent induction of apoptosis. However, the reviewer does not believe that just apoptosis causes a great reduction of tumor growth. Inhibition of angiogenesis and induction of necrosis are also a reason for reducing tumor growth. The authors should investigate such subjects. The most important data in this article is Figure 5. How did the authors evaluate the significance among the groups? : the number of apoptotic cell in a high power field?, area of apoptosis? Figure 5D looks all necrosis. The authors should show increased caspase-3 expression to induce apoptosis. Minor criticisms: Page7: The method of administration is not understood. SIN group (25mg/kg/day), 5-FU group (12mg/kg/day) is shown. Does it mean daily? The authors mentioned "Treatment was administered via intratumoral injection every 3 day". Are SIN group (25mg/kg) and 5-FU group (12mg/kg) correct? Page 7, line 1: What does "P < 0.05" mean?

## ESPS Peer-review Report

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

**ESPS Manuscript NO:** 5279

**Title:** Cooperative inhibitory effect of sinomenine combined with 5-fluorouracil on esophageal carcinoma

**Reviewer code:** 02446446

**Science editor:** Cui, Xue-Mei

**Date sent for review:** 2013-08-27 15:39

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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 TO AUTHORS

Comments to authors: -The manuscript entitled "Cooperative inhibitory effect of Sinomenine combined with 5-fluorouracil on esophageal carcinoma" is conducted according to the highest standards of biomedical research. Furthermore, it address a topic (treatment of esophageal cancer) that matter on national and global scale. -Zi-Rong Yang and coauthors represent a study on Cooperative inhibitory effects of SIN and 5-FU on esophageal cancer using Eca-109 cells by measuring CCK-8 dye absorbance of living cells and by detecting the percentage of cells undergoing apoptosis. Western blot was also used to investigate the essential mechanism underlying SIN and 5-FU-induced apoptosis. SIN 25 and 5-FU, either combined or alone, was injected into the nude mice and the inhibitive and side effects were observed. -The paper mainly present four key contribution: 1-SIN and 5-FU either combined or individually significantly inhibited the proliferation of Eca-109 cells and induced obvious apoptosis. 2-The percentage of apoptotic cells induced by SIN and 5-FU combined or alone were significant. 3-The up-regulation of Bax and down-regulation of Bcl-2 reflected that the essential mechanism of apoptosis induced by SIN and 5-FU is on the mitochondrial pathway. 4- SIN and 5-FU alone inhibited the growth of tumor xenografts significantly in vivo (nude mice) and the combined inhibition rate was higher. The manuscript is very well written and I have no issues with this paper, but some minor changes should be made: 1-In the Discussion section, please remove any repetition of literature review you have mentioned in the introduction. 2-Please clarify how you measured the tumor xenografts size (100 mm<sup>3</sup>) in the nude mice after growing for 14 days. 3-Please provide direction for further studies. 4-Some typographical mistakes need t be corrected.