

## ESPS PEER-REVIEW REPORT

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

**ESPS manuscript NO:** 17424

**Title:**  $\beta$ -elemene enhances radiosensitivity of gastric cancer cells through inhibition of Pak1 activation

**Reviewer's code:** 03004155

**Reviewer's country:** China

**Science editor:** Jing Yu

**Date sent for review:** 2015-03-07 16:23

**Date reviewed:** 2015-04-21 16:51

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> 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

The authors present data suggesting that  $\beta$ -elemene enhances the radiosensitivity of gastric cancer cells via up-regulation of PAK1IP1 (p21-activated protein kinase-interacting protein 1) and down-regulation of phospho-Pak1 (T423) and phospho-ERK1/2. The therapeutic potential of  $\beta$ -elemene as a radiosensitizer for gastric cancer may be worth pursuing. This is an interesting work. However, one main issue should be addressed before resubmission: The manuscript is devoid of direct evidences indicating that  $\beta$ -elemene enhances the radiosensitivity of gastric cancer cells via up-regulation of PAK1IP1. It is recommended to detect the effects of alteration of PAK1IP1 expression (overexpression and knockdown) on the  $\beta$ -elemene-induced radiosensitivity of gastric cancer cells. Additionally, some grammar errors were occurred in the manuscript. For example, In Page 2 Line 9 " $\beta$ -elemene pretreatment with decreased clonogenic survival following ionizing radiation (IR) and increased radiation-induced cell death in MKN45 and SGC7901 gastric cancer cell lines." The word "with" in this sentence should be deleted. It is strongly recommended to double check the whole manuscript before resubmission.

## ESPS PEER-REVIEW REPORT

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

**ESPS manuscript NO:** 17424

**Title:**  $\beta$ -elemene enhances radiosensitivity of gastric cancer cells through inhibition of Pak1 activation

**Reviewer's code:** 03270395

**Reviewer's country:** China

**Science editor:** Jing Yu

**Date sent for review:** 2015-03-07 16:23

**Date reviewed:** 2015-04-17 10:59

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input checked="" 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 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

ESPS Manuscript NO: 17424 Title:  $\beta$ -elemene enhances radiosensitivity of gastric cancer cells through inhibition of Pak1 activation This manuscript is interesting and valuable to explore the potential of  $\beta$ -elemene as a radiosensitizer for gastric cancer cells. However, I have a question about your experiment. 1) MTT assay was adopted to determine that which gastric cancer cell line was not sensitive to the IR, and at the same time Clonogenic survival assay was adopted to observe whether  $\beta$ -elemene could promote the cell killing effect of IR on the cancer lines. My question is that why don't you use the same kind of method, such as MTT assay, to study the two experiments, which would make the results more convincing.

## ESPS PEER-REVIEW REPORT

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

**ESPS manuscript NO:** 17424

**Title:**  $\beta$ -elemene enhances radiosensitivity of gastric cancer cells through inhibition of Pak1 activation

**Reviewer's code:** 03270499

**Reviewer's country:** United States

**Science editor:** Jing Yu

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CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> 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
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<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

This is an interesting work. However, some issues should be addressed before resubmission: 1) From Figure1, the clonogenic survival of SGC7901, MKN28, and N87 are quite similar, would you please show all data of three cell lines which would make the results more convincing. 2) Figure 5,  $\beta$ -elemene increased the expression of Pak1-interacting protein 1 (PAK1IP1) in gastric cancer cells. Since PAK1IP1 was demonstrated to be a negative regulatory molecule of Pak1, here is the question, how about the expression level of PAK1IP1 after ionizing radiation treatment? Would you please show PAK1IP1 expression level in figure 5B and 5C? 3) You did clonogenic survival assay and apoptosis detection assay in MKN45 and SGC7901, But there is no western blot result of MKN45. 4) For Figure 8 and 9, please clarify the cell type for those two experiments.