

## ESPS PEER-REVIEW REPORT

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

**ESPS manuscript NO:** 20693

**Title:** New drug delivery system for liver sinusoidal endothelial cells for ischemia-reperfusion injury

**Reviewer's code:** 00053419

**Reviewer's country:** Spain

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2015-06-19 09:25

**Date reviewed:** 2015-07-06 21:24

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

The manuscript by Sano et al reports the design of a HA-S1P conjugate that is able to prevent liver damage resulting from ischemia/reperfusion more efficiently than S1P. The basis of the reported finding is that HA-S1P targets more efficiently sinusoidal epithelial cells and prevents apoptosis. The experiments are well designed and conducted but there are some issues for the authors' consideration:

1. According to the reported results, HA-S1P is an efficient way to deliver S1P in liver sinusoidal endothelial cells but it is also important to show if S1P also increases in other cell types/tissues upon treatment since it might induce non-desired side effects.
2. Redox imbalance and mitochondrial injury play central roles in I/R induced liver injury, in fact most of the molecular markers measured in the study are manifestations of these alterations. However, no attention is paid to these principal drivers of I/R injury in this study. It would be worth to show if HA-S1P prevents mitochondrial damage and redox imbalance.
3. Some figures are very small and texts (axes titles...) can be hardly read.

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

**ESPS manuscript NO:** 20693

**Title:** New drug delivery system for liver sinusoidal endothelial cells for ischemia-reperfusion injury

**Reviewer's code:** 00068153

**Reviewer's country:** China

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2015-06-19 09:25

**Date reviewed:** 2015-06-23 16:33

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 checked="" 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"/> 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

Hepatic I/R injury is a major problem in liver transplantation and liver resection and a critical event during hepatic I/R injury is the death of liver sinusoidal endothelial cells (LSECs). In this study, the authors developed a new drug delivery system for targeting the LSEC by combining S1P with HA to make a formula of HA-S1P. They found HA-S1P exhibited cytoprotective effect on the liver by protecting LSECs, which demonstrated that HA-S1P might be a promising new agent for hepatic I/R injury.