

# ESPS Peer-review Report

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

**ESPS Manuscript NO:** 10381

**Title:** Beneficial Effects of Adenosine Triphosphate-Sensitive K<sup>+</sup> Channel Opener (Diazoxide) on liver ischemia/reperfusion injury

**Reviewer code:** 00004425

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2014-03-29 14:32

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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 checked="" 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)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Major revision

# COMMENTS TO AUTHORS

This study evaluated the effects of mitochondrial K<sup>+</sup> channel opener diazoxide on liver ischemia/reperfusion (I/R) injury using a rat in vivo warm I/R model. It shows that diazoxide decreased AST and ALT release after hepatic warm I/R but did not protect against liver histological changes and lung and kidney injury. Diazoxide improved mitochondrial function, reduced reactive nitrogen species formation and decreased inflammatory cytokine production after I/R. 1. Although this study provides some interesting data, protective effects of diazoxide after hepatic warm I/R in rats and cold I/R (transplantation) in rats and mice have been reported previously. Protection against mitochondrial cytochrome c release after hepatic warm I/R in rats by diazoxide has also been reported. Therefore, it is important to discuss what new information is provided by this study. 2. It would be more convincing if liver histology is shown and necrosis and apoptosis are quantified. 3. Damage to remote organs often occurs later than damage to the liver. Moreover, creatinine takes time to accumulate in serum. In this study, lung injury was evaluated at 4 h and the time point for creatinine measurement was not mentioned. Whether the lung and kidney injury at later time point was attenuated by diazoxide? 4. Figs 1 and 2 can be combined into one figure. 5. Please clarify how the lung was rinsed before EBD (via trachea or blood vessel). 6. On p11, line 2, "to" is missing after "compared".