Baishideng Publishing Group Co., Limited
Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

ESPS Peer-review Report
Name of Journal: World Journal of Gastroenterology
ESPS Manuscript NO: 4471
Title: melioration of carbon tetrachloride-induced cirrhosis and portal hypertension in rat using adenoviral gene transfer of Akt
Reviewer code: 00058372
Science editor: Wang, Jin-Lei
Date sent for review: 2013-07-02 10:10
Date reviewed: 2013-07-24 13:47

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
[ ] Grade A (Excellent)	[Y] Grade A: Priority Publishing	Google Search:	[ ] Accept
[ ] Grade B (Very good)	[ ] Grade B: minor language polishing	[ ] Existed	[ ] High priority for publication
[Y] Grade C (Good)	[ ] Grade C: a great deal of language polishing	[ ] No records	[ ]Rejection
[ ] Grade D (Fair)	[ ] Grade D: rejected	BPG Search:	[ ] Minor revision
[ ] Grade E (Poor)		[ ] Existed	[Y] Major revision
		[ ] No records	

COMMENTS TO AUTHORS

Deng et al used a recombinant Akt vector in vivo to examine the effects of Akt on carbon tetrachloride-induced cirrhosis in rats. Results indicate that Akt improved liver histology and function and reduced portal venous pressure, liver apoptosis and collagen levels. The study provides some interesting data on the role of Akt in the prevention of CCl_4 induced liver injury. However, there is a number of issues that need to be addressed. Major concerns. 1. There is evidence of expression of the control vector mainly in the liver with less in the kidney. Images of Ad-EGFP tissue expression are not clear (Sup Fig 1) and higher magnification is required. Surprisingly liver Akt protein expression was not increased only pAkt levels (Fig 4 +5). Why is that? 2. VG staining is low quality and it is difficult to detect collagen deposition. The VG stained Akt-cirrhosis section is poor and there is evidence of many vacuoles, which are not seen in the corresponding HE section (Fig 2). 3. No detail of the hepatocyte isolation procedure for the flow cytometry experiments was provided. How was it assessed whether hepatocytes or mixed population of liver cells were used (Fig 3). Furthermore, protein expression in whole tissue was presented in Fig 4 so it is not known which types of cells are undergoing apoptosis. 4. It is not clear whether total caspase 3/9 or cleaved caspase3/9 protein expression was measured (Fig 4). Changes in cleaved not total caspase levels are associated with apoptosis. Minor concerns. 1. page 4 para 1. Provide references for (i) Frank L Graham's method and (ii) Akt "primer pair as we previously reported." 2. page 5, para 3. Provide details of automatic biochemical analyser used to measure ALT, AST, ALB levels.

Baishideng Publishing Group Co., Limited
Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

ESPS Peer-review Report
Name of Journal: World Journal of Gastroenterology
ESPS Manuscript NO: 4471
Title: melioration of carbon tetrachloride-induced cirrhosis and portal hypertension in rat using adenoviral gene transfer of Akt
Reviewer code: 00199556
Science editor: Wang, Jin-Lei
Date sent for review: 2013-07-02 10:10
Date reviewed: 2013-08-11 05:12

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
[ ] Grade A (Excellent)	[ ] Grade A: Priority Publishing	Google Search:	[ ] Accept
[ ] Grade B (Very good)	[Y] Grade B: minor language polishing	[ ] Existed	[ ] High priority for publication
[Y] Grade C (Good)	[ ] Grade C: a great deal of language polishing	[ ] No records	[ ]Rejection
[ ] Grade D (Fair)	[ ] Grade D: rejected	BPG Search:	[Y] Minor revision
[ ] Grade E (Poor)		[ ] Existed	[ ] Major revision
		[ ] No records	

COMMENTS TO AUTHORS

I have read the article entitled" Amelioration of carbon tetrachloride-induced cirrhosis and portal hypertension in rat using adenoviral gene transfer of Akt" The topic is new and the manuscript is well-written, methods are well-designed, appropriate and well described. The manuscript adheres to the relevant standards for reporting and data deposition. However, some points should be clarified as follow: 1-In the method section the author mention the induction of cirrhosis using carbon tetrachloride (CCl_4) as previously reported (11). I hope the authors could give a brief description of the method used for induction of liver cirrhosis (dose of CCl_4, vehicle used duration of experiments…etc). 2- In the method section under the title Examination of transplanted GFP+ cells The author used Mice. Why the author used mice here and used rats in all other experiments. I think using the same type of animals would be appropriate throughout the experiments. 3- Also grammatically mice were and not mice was. 4- in Supplementary Fig. 1. Tissue distribution of transferred viruses in the host: it is obvious that the transfection with this virus is not completely selective for liver as there is some distribution in the kidney tissues. 5-one of the most important markers for liver cirrhosis is serum levels of bilirubin (total, direct) and also serum levels of alkaline phosphatase enzymes (ALP). Does the author have some data about these two parameters to be included to the article? 6- The discussion section reveals that Akt plays a crucial role in preventing Fas signaling-mediated hepatic apoptosis, and that over-expression of Akt was capable of preventing hepatic apoptosis however, the author should discuss if there is a correlation between this system in rats and humans.