

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 45053

Title: Ubiquitin-conjugating enzyme YT knockdown suppresses the hepatocellular tumorigenesis via inducing cell cycle arrest and apoptosis

Reviewer's code: 02860835

Reviewer's country: France

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-01-29 08:44

Reviewer performed review: 2019-01-30 12:27

Review time: 1 Day and 3 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input checked="" type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input checked="" type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

This manuscript of Jian Guo et al. aims to study the impact of the ubiquitin-conjugating enzyme E2T (UBE2T) in hepatocellular carcinoma (HCC). They confirmed that UBE2T expression was increased in HCCs as compared non-tumor tissue. Using the two HCC

cell lines BEL-7404 and SMMC-7721, they showed that UBE2T silencing impaired cell proliferation promoting a G1 to S phase arrest and apoptosis and also decreased tumorigenesis in xenografts. At the molecular level, they performed gene expression profiling by microarray to identify the gene program modified by UBE2T-silencing. My main concern with this study is the use of two cell lines, which have been demonstrated as HeLa-derivative, particularly the SMCC-7721 (Rebouissou, J. Hepatol. 2017). In consequence, the authors had to confirm their study in two non-contaminated HCC cell lines or provide proof of BEL-7404 and SMMC-7721 origins with a panel of short tandem repeats, hepatic gene expression and specific gene mutations. Major points: 1. My main concern is the choice of the two cell lines, BEL-7404 and SMMC-7721 for the study. Firstly, accordingly to the manuscript of Liu et al. in 2017 in Biochem Biophys Res Commun, the expression of UBE2T is not the highest in these cell lines. What is the rationale of the authors for such a choice? Secondly, and more importantly, these cells have been demonstrated as HeLa-derivative, particularly the SMCC-7721 cells (Rebouissou, J. Hepatol. 2017). In consequence, the authors had to confirm their study in two non-contaminated HCC cell lines or provide proof of BEL-7404 and SMMC-7721 origins with a panel of short tandem repeats, hepatic gene expression and specific gene mutations. 2. Concerning the shRNAs, only one shRNA against UBE2T has been used. Two shRNAs will be more rigorous. Additionally, the shCtrl matches with SLK with 68% homology. What is the effect of the shCtrl on this RNA/protein? 3. Concerning the human analysis, the patients were divided into low or high UBE2T expression. How did the authors divide the patients? What is the threshold value? This had to be detailed. 4. In figure 3, what is the expression of UBE2T in the xenografts? An analysis of proliferation and apoptosis will be very informative. 5. In figure 6, why did the authors use cells rather than tumors? Only one point for each condition is not sufficient for a microarray analysis. Considering that a number of immune signaling seem to be altered



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-223-8242
Fax: +1-925-223-8243
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

in response to UBE2T silencing, it will be important to perform this analysis on at least two tumors for each condition. Minor points: 1. The expression of UBE2T is increased in HCC but nothing is said about the cause of this upregulation. This had to be explained or hypothesized.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 45053

Title: Ubiquitin-conjugating enzyme YT knockdown suppresses the hepatocellular tumorigenesis via inducing cell cycle arrest and apoptosis

Reviewer's code: 02679742

Reviewer's country: South Korea

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-01-29 09:00

Reviewer performed review: 2019-02-01 11:22

Review time: 3 Days and 2 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input checked="" type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors demonstrated overexpression of the UBE2T in the HCC and the high expression group of HCC showed poor overall survival. And the UBE2T KO induced inhibition of proliferation by cell cycle arrest and apoptosis. In addition, many

UBE2T-related genes were found. The topic of this study is of fair interest. The manuscript is well organized and written. There are some concerns, however. 1. It would be appropriate to investigate the lesion of hepatocyte by dividing according to the progression of the lesion in order to study the development like precursor, early and advanced lesions. 2. The author have to investigate the status and effects of p53 because the p53 and UBE2T not only showed relationship in HCC, but p53 controls the apoptosis and cell cycle. 3. It is unnecessary to describe the same things both in the introduction and discussion. 4. The authors should discuss the meaning or effects of UBE2T-related genes. 4. The thought that UBE2T can be a diagnostic candidate for HCC might be not suitable from this study.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No