

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 2753

Title: A possible role of TGF- β 1 promoter hypermethylation in gastric cancer

Reviewer code: 00003252

Science editor: Zhai, Huan-Huan

Date sent for review: 2013-03-12 19:25

Date reviewed: 2013-04-04 22:24

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

COMMENTS TO AUTHORS

In this work, authors investigated TGF- β 1 promoter methylation in gastric tissues from 47 cancer patients and 39 non-cancer subjects and also examined the possible implication of H. pylori infection in TGF- β 1 promoter methylation. They showed a significantly higher frequency and extent of TGF- β 1 methylation in cancer tissues compared to normal mucosa. Additionally, they found higher TGF- β 1 promoter methylation in H. pylori-infected patients compared to controls. However, they observed that IL-1 β but not H. pylori induces TGF- β 1 methylation. Based on these results, authors concluded that TGF- β 1 promoter methylation in H. pylori positive patients might be associated with H. pylori-induced inflammation rather than H. pylori itself. This manuscript is well written and contains potentially interesting findings. However, there are some concerns.

1. The MSPCR strategy used in this study is not quantitative and thus promoter methylation level determined by densitometric analysis of band intensity is not convincing. Authors should confirm their promoter methylation results by sodium bisulfite DNA sequencing analysis at least for several representative specimens (in particular, H pylori and IL-1b experiments).
2. Authors also need to prove quantitative nature of their assay for the correct interpretation of the results. For example, control gene for PCR itself, validation of methylation level assay using serial dilution of target DNA, or positive control generated by SssI methyltransferase-treated normal DNA could be considered to address this technical issue.
3. Authors need to test whether IL-1b or H. pylori could modulate mRNA expression of TGF-b1. qRT-PCR would be a good choice to examine whether IL-1b/H.pylori induces down-regulation or reduction of TGF-b1 mRNA expression in gastric cells. Likewise, it would be helpful to test whether TGF-b1 mRNA expression inactivated by IL-1b is restored by 5-Aza-dC treatment.

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Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 2753

Title: A possible role of TGF- β 1 promoter hypermethylation in gastric cancer

Reviewer code: 00051227

Science editor: Zhai, Huan-Huan

Date sent for review: 2013-03-12 19:25

Date reviewed: 2013-04-09 21:59

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" 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 type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

The manuscript by Wang Y-Q et al. demonstrates that high level of TGF- β 1 promoter methylation in H pylori positive patients was the results of H. pylori induced inflammation rather than H. pylori itself, and that IL-1 β may be an important mediator for H. pylori induced gene methylation during gastric cancer development. The overall goal of the paper is relevant. The data presented are solid and credible. The results are interesting, clinically important and worth of publication in WJG.