

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 11101

Title: Differential gene expression profiling of gastric low-grade and high-grade intraepithelial neoplasia and early-stage adenocarcinoma

Reviewer code: 02861643

Science editor: Su-Xin Gou

Date sent for review: 2014-05-05 19:28

Date reviewed: 2014-05-13 11:46

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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"/> Existed	<input checked="" 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"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	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

GENERAL COMMENTS The authors investigated the gene expression profiling of gastric high- and low-grade intraepithelial neoplasm and early-stage adenocarcinoma and try to explore the molecular alteration in the malignant progression of gastric neoplasia. Despite the small sample size, the research is of significance in understanding the pathogenesis of gastric cancer and their discoveries add new knowledge on this respect. **SPECIFIC COMMENTS** The manuscript is well written and readable. Comments are listed as follow: 1. Materials and methods (1)The source of reagents is not introduced in same format, which may cause confusing. (2) "Statistical analysis": the statistical significant should be expressed by P value but not " $\alpha=0.05$ ". 2. Although the microarray analysis and qPCR analysis showed the G0S2 expression was higher in EGC than in HGIN, the immunohistochemical staining results showed the expression rate of G0S2 was higher in HGIN but similar in LGIN and EGC. This discrepancy is not explained in the Discussion.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 11101

Title: Differential gene expression profiling of gastric low-grade and high-grade intraepithelial neoplasia and early-stage adenocarcinoma

Reviewer code: 02441405

Science editor: Su-Xin Gou

Date sent for review: 2014-05-05 19:28

Date reviewed: 2014-05-16 21:48

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Y] Accept
<input checked="" type="checkbox"/> Y] Grade B (Very good)	<input checked="" type="checkbox"/> Y] 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"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	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

This manuscript presents an interesting differential gene expression profiling of gastric low grade intraepithelial neoplasia (LGIN), high grade intraepithelial neoplasia (HGIN) and early gastric cancer (EGC). From their microarray data, authors identified G0S2, a putative lymphocyte G0/G1 switch gene product as a potential marker to differentiate low grade neoplastic lesion from high grade lesion in the stomach. Major concerns: 1. The concordance of diagnosis for LGIN, HGIN and EGC between two pathologists. Interdepartmental and interpersonal interpretational variability is well known. The author should mention how this issue was resolved. Did two pathologists review all cases from two different hospitals and agree with all the diagnosis? It is very difficult sometimes to distinguish between HGIN and EGC. Due to sampling issue, some HGINs on the biopsy may be a part of EGC. The Uncertainty of the diagnosis will result in insignificantly difference of the molecular profiles between these two stages of disease. 2. In gene profiling (figures 1 and 2) and GOS2 analysis (figure 3 and 4), there was no NORMAL tissue as controls. Authors need provide reason (s). 3. For scoring immunohistochemical staining result, authors need explain how two pathologists resolved the discrepancy between their scorings. It is hard to image both pathologists would have the same scoring results for all cases. 4. The reviewer is not sure that figure 5C represents EGC. It appears more like HGIN. Minor issues: 1. Authors may need a short introduction of GOS2, either in the Introduction or Discussion section. 2. Did authors have any cases with a spectrum of disease (chronic gastritis, LGIN, HGIN and EGC) in single patients? Comparison of expression profiling among the different disease stages in the same patients may yield more meaningful results.

ESPS Peer-review Report**Name of Journal:** World Journal of Gastroenterology**ESPS Manuscript NO:** 11101**Title:** Differential gene expression profiling of gastric low-grade and high-grade intraepithelial neoplasia and early-stage adenocarcinoma**Reviewer code:** 02861170**Science editor:** Su-Xin Gou**Date sent for review:** 2014-05-05 19:28**Date reviewed:** 2014-05-18 23:42

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input 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"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	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

The present manuscript aimed to investigate molecular alterations in the malignant progression of gastric neoplasia by comparison of microarray data between gastric low-grade intraepithelial neoplasia (LGIN), high-grade intraepithelial neoplasia (HGIN) and early gastric cancer (EGC). Overall the authors presented a very interesting study for the understanding of gastric cancer pathogenesis. However, the paper needs some improvements before the publication. 1) Statistical significance should be expressed by P value. 2) A G0S2 description might be important either in the Introduction or Discussion section. 3) G0S2 immunohistochemical results should be addressed in the discussion in light of the discrepancy with gene expression profiling.