

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 19526

Title: Tight Junction Disruption: Helicobacter pylori and Dysregulation of the Gastric Mucosal Barrier

Reviewer's code: 00038586

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CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	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"/> The same title	<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"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input type="checkbox"/> No	

COMMENTS TO AUTHORS

General: The review study by Caron TJ et al., to summarizing the current state of knowledge about gastric tight junctions in normally and in H.pylori infection, and make predictions about the consequences of claudin reorganization during H.pylori infection. The review is well writing and important in this field. I do however, have the following comments. 1. In the "chapter" Tight junctions and the mucosal barrier in stomach` I would prefer the following sub-section order to get the paper more clear: 1. Tight junctions: general overview 2. Tight junctions: regulation of paracellular permeability 3. Tight junctions: molecular architecture in gastric epithelial cells 4. Claudins and selective permeability or "permselectivity" 5. Claudin expression in the stomach-an overview 6. Claudin-18 expression in gastric epithelial cells 2. In the introduction (page 4) under the sub-section "The organization of human and mouse stomach and gastric glands" you write that there are four functional regions, but in the text there is just three parts (1) the cardia, 2) the fundus-body and 3) the pylorus). 3. There are abbreviations: Please sign it out in first place! ZO-1 (page 6, lane 3) MAG proteins (page 6, lane 3) MUPP-1 (page 6, lane 3) GC (page 9, lane 18) HRP (page 14, lane 6).

4. I don't understand the following sentence (page 18, lane 5), "In AGS cells, treatment with CagA+ H.pylori also upregulated cdx2 and claudin 2 expression so it wasWhat did you mean with cdx2? 5. There is sometime difficult to follow in which cell type claudin expressions exist (page 9-11). For example claudins 1, 3, 18 and 23 have been demonstrated in pyloricor body of the stomach or surface epithelial cells or gastric gland cells e.g. mucous neck, parietal chief, base.... Is it possible to do a table (see below) on different claudins and expression profile?

Cardia	Fundus-Body				
Pylorus	Surface epithelial cells	Gland mucus cell	Surface epithelial cells	Gastric pits:pit cell	Long gland: isthmus, neck, base
	Surface	Gland	mucus cell	Claudin 1	Human (ref 29)
	Claudin 2				
	Claudin 3	Human (ref 29)	Claudin 4	Claudin 5	Claudin 12
					Claudin 18
	Human unspecified (ref 29)	Human (ref 29)	Claudin 23...		Human (ref 29)