Reviewer's report

Title: Up-regulation of CLDN1 in gastric cancer is correlated with reduced survival

Version: 2 Date: 3 August 2013

Reviewer: Shaolei Lu

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This study reported transcription profiles of 20 gastric cancers of various pathological stages, lymph node status and histological types. The finding of claudin 1 within the top differentially upregulated genes in gastric cancer echoes another similar study by Cho et al (Clin Cancer Res; 17(7); 1850–7) where claudin 1 is the top one in the upregulated gene list (accessed through oncomine.org). The study also identified a chemokine, IL-8, expressed strongly in gastric cancer. The survival analysis further emphasized the role of claudin 1 in the disease process. Overall, the study is a sound and coherent work.

No major compulsory revision.

Minor essential revisions:
1. Similar gene expression and immunohistochemical studies have been published. Some of them should be mentioned in the discussion, such as the study above and an IHC study (Hum Pathol. 2005 Aug;36(8):886-92).
2. Intestinal type and diffuse type gastric cancers apparently take two different pathways of tumorigensis. It is assumed that this study did not reveal any significant gene expression difference in different cancer types. It is still worth mentioning in the discuss this negative finding to help future researchers design related new studies.
3. The finding of IL-8 highly expressed in cancer tissue could be due to peritumoral or intratumoral chronic and acute inflammation which should be evaluated or commented.
4. Two cancers are from Asian patients. Are they the same two showing active H. pylori infection? It may be mentioned in the text.

Discretionary Revisions:
Good quality claudin-1 antibody is available. It would be useful to show some representative IHC images of claudin-1 in cancers of this study.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.