Reviewer's report

Title: Evaluation and clinical significance of the Stomach Age model for evaluating aging of the stomach----A multicenter study in China

Version: 2  Date: 18 June 2013

Reviewer: Junko Aida

Reviewer's report:

Major Compulsory Revisions
1. Problems of the FISH analysis
The authors analyzed at 5 regions of the biopsied gastric mucosa, however, they didn't describe which part of the mucosa they analyzed. There are differences in telomere lengths among the each cell composing gastric mucosa, i.e. foveolar epithelium, fundic or pyloric gland cells, fibroblasts etc. (Aida J, Hum Pathol 2007). The specimens of active gastritis, there should be many inflammatory cells, that have telomerase and long telomeres. So the intensity of the 'region' is considered to depend on the amount of inflammatory cells. Therefore, the reliability of the telomere length data they show, as far as they test them by a described method.

2. Problems of the flow cytometry
The authors described the biopsy specimen were prepared as single cell suspensions. The biopsy specimens are not simple tissue, including gastric epithelium (foveolar epithelium, proprial gland, or goblet cells and so on), fibroblasts, vascular endothelia, inflammatory cells, and so on. Those samples are not examined histologically, so they might include tissue include inflammatory cells or fibroblasts. The method is for cultured cells, originally. Therefore, the reliability of the flow cytometric data they show, as far as they test them by a described method.

Minor Essential Revisions
1. Figure 1 and Figure 2 are not consistent with the text of the description. They should reverse them.
2. Figure 3 legend include abbreviated word CSG. This word is the first appearance, but there isn't description the abbreviation of what words.
3. In the Figure 3, the differences are shown, but it is not clear whether it is the differences between which bar and which bar.
4. In the Figure 5, the numbers of group A, B, C, so the ratios should be described in the y-axis, not number.
5. In the Figure 6, the name of y-axis is 'Percent survival', but the percent data are not shown.
6. The name of the author of the reference number #9 is error.
Discretionary Revisions
Discussion is too long and not so clear. What is the basis that the authors consider that CAG in young adults is quite different to the CAG in older people. At least, the third paragraph in page 18 is too long to read and grasp the authors’ meaning clearly.

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

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.