

Feb 15, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 7693-revision.doc).

Title: Up-regulation of mitochondrial chaperone TRAP1 in ulcerative colitis associated colorectal cancer

Author: Ru Chen, Sheng Pan, Keith Lai, Lisa A Lai, David A Crispin, Mary P. Bronner, and Teresa A. Brentnall,

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 7693

The manuscript has been improved according to the suggestions of reviewers:

1. Format has been updated

2. Revision has been made according to the suggestions of the reviewer

(1) The reviewer inquired about oxidative stress level in the mucosa of LGD and Cancer.

As suggested by reviewer, we performed experiment to measure protein carbonyls in the mucosa of LGD and cancer. New data and results are presented in revised Figure 6 and manuscript page 8, second paragraph.

(2) The reviewer inquired about possible correlation between TRAP1 and Bcl-2.

In the previous study (carried by co-author Dr. Bronner, reference 22), anti-apoptotic protein Bcl-2 was found to be increased in 76% of ulcerative colitis associated dysplasia. In our current study, 69% of the progressors displayed positive TRAP1 staining in the dysplastic or cancerous tissues. Therefore, we believe that our current data is consistent with previous results that there are increased anti-apoptotic activities in UC dysplasia. The previous study was carried out almost thirty years ago, and the specimens used in our current study were different from those used in previous study. We could not perform one-on-one correlation analysis. These new discussion was incorporated in the revision, first paragraph on page 11.

(3) The reviewer inquired about confirmation of IHC data.

The confirmation study was actually carried in our prior publication (reference 13), where we showed that the IHC data confirmed the proteomics data. Since both IHC and proteomics detect protein, they are suitable methods for confirmation of each other. However, qRT-PCR detects mRNA, and published studies already suggest that protein expression does not always correlate with mRNA level.

(4) The reviewer noticed missing of "*" in Figure 1.

These "*" were lost during file conversion in the original submission. They have been added to the revision Figure 1.

3. References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ru Chen', with a large, stylized initial 'R'.

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