ANSWERING REVIEWERS

March 28, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 9838-review.doc).

Title: CT perfusion imaging as a potential imaging biomarker of colorectal cancer

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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) **Reviewer1:** This review is well written and organized. It summarized the utilization of CT perfusion imaging in the monitoring and prediction of tumor response to radiochemotherapy and antiangiogenic targeted therapy as well tumor development. Minor point: MRI is the major imaging modality of rectal cancer. Is there a role of perfusion MRI in the management of rectal cancer similar to CT perfusion? If yes, pls compare these two modalities.
Response: Thank you for your comment. But the focus of this paper is "CT perfusion", thus I didn't discuss DCE-MRI. Recently some DCE-MRI studies reported its association with angiogenesis or therapy response, thus DCE-MRI also may have a possibility to be a biomarker. But I thought that it might be better and reasonable not to discuss DCE-MRI in this review so that readers can focus on the biomarker value of CT perfusion.

(2) **Reviewer2:** Congratulations, I regretted no comparative comparison with Pet-Scan an Genetis Expression.
Response: Thank you for your comment. This review was written focusing on the biomarker value of CT perfusion, thus I didn't write a comparison of CT perfusion with PET or genetic expression. Previous reports concerning association of CT perfusion with PET or genetic expression are limited, thus, I will investigate these associations in the future study.

(3) **Reviewer3:** This is a concise review article regarding the current status and future perspective of CT perfusion imaging on clinical practice of colorectal cancer. Although this technique appeared to be promising in the future, the number of reported articles has still been small and the results are controversial. Nevertheless, readers would be able to understand the current standpoint of this technique in CRC clinical practice. Only one suggestion is raised by this reviewer. The standard protocol and details of making CT perfusion images should be stated. What performance is required on the CT machine? How many detector rows are required? How much amount of a contrast agent is required? How many times and when after the injection of a contrast medium should the body be scanned?
Response: Thank you for your comment. In the introduction, we have written the protocol of CT perfusion technique briefly. And I added some sentences about CTP protocol in this revised version

according to your suggestions. A lot of previous review papers about CT perfusion have already discussed the CT perfusion protocol and technical problem, thus, in this paper, we'd like to focus on the biomarker value of CT perfusion rather than protocol. Concerning the number of detector, even 4-MDCT is applicable for CT perfusion study. But dose of contrast material and injection rate are more important, thus, I mentioned it in the revised version.

3 References and typesetting were corrected

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

Sincerely yours,

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