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**Dr Liang-Sheng
President and Editor-in-Chief
World J of Gastroenterology**

Paris, April 4th, 2014

Dear Dr. Liang-Sheng,

Please find enclosed our revised manuscript by R. Coriat et al. entitled "Gastric emptying evaluation by ultrasound prior colonoscopy: An easy tool following bowel preparation.", re submitted to *World Journal of Gastroenterology*.

We would like to thank the reviewer for their constructive comments, which helped to guide the revisions to the manuscript. Please find below the point-by-point replies to the Reviewer's comments. These responses have been added to the revised manuscript.

- 1. Comment 1 from Reviewer:** "The manuscript entitled "Gastric emptying evaluation by ultrasound prior colonoscopy: an easy tool following bowel preparation" employed thirty patients to conduct a prospective, non-comparative, and non-randomized trial and to evaluate gastric volume measured by ultrasound as the measurement of total gastric emptying. They found that gastric volume evaluation appears to be a simple and reliable method for the assessment of gastric emptying."

We do agree with the reviewer that our article paves the way for the utilization of gastric volume evaluation for the assessment of gastric volume.

- 2. Comment 2 from Reviewer:** «This was a non-comparative and non-randomized trial therefore, there was no comparison with other methods. But it still could be a method to evaluate gastric emptying for colonoscopy. »

We do agree with reviewer comment that our non-randomized trial might deserve a comparison with other methods. This point was highlighted in the revised article in the discussion section. We now read: "Gastric scintigraphy had become the reference technique for gastric emptying evaluation but has the disadvantage of irradiation, cost, limited availability of gamma cameras, the need for radioactive labels, and many sources of error. Gastric emptying assessed by scintigraphy were therefore not possible in current practice. Meanwhile, the study of Benini et al. in solid meal

confirms that ultrasound is as good as scintigraphy for the measurement of gastric emptying [15]. Perlas et al. previously identified the bedside two-dimensional ultrasonography as a useful non-invasive tool to determine gastric content and gastric volume [11].”

3. Comment 3 from Reviewer: «Although gastric volume evaluated by ultrasound could measure gastric emptying, its impact of general anesthesia was not indicated. »

As highlighted by the reviewer, the clinical impact of gastric emptying evaluation by ultrasound is important and may help the anaesthesiologist to confirm gastric emptying before general sedation. This point was added in the discussion section. We now read: “the ultrasound technique was validated in patients undergoing elective surgery and reinforced the feasibility of this technique to identify the absence of residual gastric fluid at the time of anaesthetic induction [16]. Considering the lack of toxicity of the bedside ultrasound and the feasibility of the technique, ultrasound evaluation appears to be a useful technique to confirm gastric emptying prior sedation.”

4. Comment 4 from Reviewer: «Figure 5 was a good finding to show gastric volume according to gender, BMI and smoking, but rationale and discussion about these analyses were not clear exception of body weight mentioned in the discussion. »

The gastric evaluation by ultrasound appeared as a useful tool that may help the physicians to confirm the lack of residual liquid and may induce complication during general anaesthesia.

Jakson et al identified a delayed gastric emptying in obese and concluded that this delay may be a consequence of the increased gastric distension associated with obesity (Jackson et al, Diabetes Obes Metab, 2004). Meanwhile, a high body mass index has been identified as a prognostic factor of gastroparesia and increased the difficulty of ultrasound evaluation. As shown in figure 5, we didn't have any delayed of gastric emptying in patients with body mass index higher than 25 compare to normal population. It is of interest to highlight that diabetic patients were not included in the present study.

Concerning the smoking activity, it has been identified since 1989 that smoking delays gastric emptying of solids, but not liquids and that nicotine is not responsible for this effect (Miller et al, Gut, 1989). Therefore we investigated this point in our phase 2 study. Justification of the smoker and body mass index' choices are now justify in the revised manuscript.

Those two points have been added in the discussion section. We now read: “In the present study, we identified no modification of gastric emptying between patients considering BMI and smoking activity. Patients with BMI lower or equal to 25 kg/m² have no significant differences of gastric emptying compare to patients with BMI above 25 (Figure 5B). In the other hand, a delayed of gastric emptying have been identify in obese patients [19]. In our study, no obese patients (BMI >30Kg/m²) were included and diabetes was considered as non-inclusion criteria. Those two points may explain the trend of gastric emptying in patients from 25 to 30kg/m² compare to normal BMI patients. In our study, non-smokers tended to have a lower gastric volume in line with a higher gastric emptying than former smokers and smokers. It has been identified that smoking delays gastric emptying of solids, but not liquids [20]. In our study, patients' intake is pills for a total number of 32 and water, which may explain the tendency to a higher gastric emptying observed in non-smokers.”

We hope that the revised manuscript will fulfil your standards for publication, and we would be grateful if you would reconsider its publication in *Anti-cancer Drugs*.

Yours sincerely,

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