ANSWERING REVIEWERS

August 30, 2012

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 4850-review.doc).

Title: Quantification of pancreatic exocrine function of chronic pancreatitis with secretin-enhanced MRCP

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Name of Journal: *World Journal of Gastroenterology*

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I have read the referee's comments carefully and have made correction which we hope to meet with their approval.

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) Why the authors did not use "secretin cerulein test" as the gold standard?

The secretin cerulein test is a kind of direct pancreatic function tests. It has the highest

sensitivity and specificity for the detection of exocrine pancreatic insufficiency and remain the gold standard for testing pancreatic function [1-4]. But it is time

consuming, invasive, expensive, uncomfortable, not standardized, and require fluoroscopic tube placement. So the secretin cerulein test is unsuitable for clinical application [5, 6].

Although there are several simple indirect pancreatic function tests for clinical

practice, we chose FE-1 test as standard, because of the following reasons[8-10]:

1) Estimation of fecal elastase-1 level to determine pancreatic function is simple, rapid, cost-effective and easier to perform than other tests even in children and old .
2) Pancreatic elastase-1 (EL-1) is a protease secreted by the acinar cells of the pancreas and is highly stable during intestinal transit. EL-1 is stable in feces at room temperature during one week, at 4℃ during one month and at -22℃ for longer time.
3) FE1 is not affected by enzyme supplements, gut transit times or fecal PH.
4) *Loser et al.* studied patients with various degrees of chronic pancreatic insufficiency comparing their secretin cerulein test results with E1 levels. They found that, using a<200μg/g cut-off, the test had an overall 93% sensitivity and 93% specificity.

(2) What were the criteria for the diagnosis of chronic pancreatitis in the study population?

We make a diagnosis of chronic pancreatitis mainly through clinical features, radiographic method and function tests. But it is still difficult to diagnose early chronic pancreatitis. The M-ANNHEIM classification is most used clinically, because it diagnosis CP from many combined elements, including multiple risk factors, clinical aspects, the endocrine and exocrine function and images[11-15]. On the radiograph, the most common criteria for chronic pancreatitis is the Cambridge classification which establishes clear-cut criteria for the description of equivocal, mild, moderate, and severe changes

by imaging, such as ERCP, CT, US[16,17]. In this manuscript, we grouped patients by M-ANNHEIM classification.

(3) The abstract section is too long, particularly in the results' section.

The abstract section has been simplified.

(4) What is the "SMRCP" abbreviation for? Abbreviations should be described in full at their first appearance in the text

"SMRCP" abbreviation for quantification of secretin enhanced magnetic resonance cholangiopancreatography.

All abbreviations of this manuscript have been described in full at their first appearance in the text.

(5) It is not clear how many patients had mild, moderate, and severe chronic pancreatitis.

The study included 36 patients with CP. The 36 patients with CP were divided into three groups of mild CP (n=14), moderate CP (n=19) and advanced CP (n=3) by M-ANNHEIM criteria for CP (Table 1).

(6)Why all numbers in the result section are presented in parenthesis?

The parenthesis around numbers in the result section has been deleted.

(7)The references are outdated.

The newest references have been added.

(8)There are multiple duplications of presentation of information in tables and the main text. Please avoid repeating the information presented in the form of figures and tables in the main text.

I have deleted the repeated information in the main text.

3 References and type setting were corrected

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

Sincerely yours,

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