Reviewer's report

Title: Value of fecal calprotectin in the evaluation of patients with abdominal discomfort: an observational study

Version: 2 Date: 24 August 2011

Reviewer: Yue Li

Reviewer's report:

- Major Compulsory Revisions

1. (Methods, Endpoint) “The definition of this endpoint was based on the assumption, that the finding would justify an endoscopic assessment.” The definition of a clinically significant organic finding in the GI tract should be addressed in details here with basis/evidence for classification of significant/minor/normal findings under endoscopy.

2. (Discussion, the 8th paragraph) Here, the authors attempted to address why RE LA-A was excluded from “clinically significant findings”. In table 2, patients with LA-A (n=25) have a lower median calprotectin level (17). Classifying this group of patients into no clinically significant findings will increase the specificity of results. There is no strong evidence to exclude it from clinically significant findings.

3. (Conclusion) “Our study demonstrated that fecal calprotectin is a useful noninvasive marker to identify patients with clinically significant findings throughout the gastrointestinal tract irrespective of age.” Conclusion should not be applied to “throughout the GI tract” for only a small number of patients in your study has been evaluated the lesions in the small intestine.

- Minor Essential Revisions

1. (Results, Diagnostic value of calprotectin in patients with negative initial endoscopy, 1st sentence) “One hundred and thirty-six patients (25%) were investigated with both EGD and colonoscopy; in 106 patients (78%) after no clinically significant findings had been identified during the initial investigation.” The sentence is confusing. Please rewrite.

2. (Discussion, 1st paragraph, last sentence) “calprotectin levels indicated disease severity in patients with peptic lesions of the stomach.” In this study, the level of fecal calprotectin was found to be higher in gastric cancer than ulcers and erosions. Gastric cancer does not belong to peptic lesions; therefore this conclusion is not justified.

3. (Discussion, 10th paragraph, 1st sentence) “All together, those results support the concept that…..and that a biomarker guided strategy might be superior to a strategy using clinical decision, including guidelines of appropriateness, to decide
on endoscopy.” From the present study, the authors could not say “superior to”, but might be “adding additional value“.

4. (Discussion, 11th paragraph) “Fourth …in expectorations of patients with acute and chronic pulmonary disease.” Please consider to delete “in” before “acute….”

- Discretionary Revisions

1. (Discussion, 3rd paragraph, last sentence) “Applying these guidelines…..but the selection criteria suffered from low sensitivity.” It would be better to add “,” before “but”.

Yue Li, MD

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.