

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 63979

Title: Altered profiles of fecal bile acids correlate with gut microbiota and inflammatory responses in patients with ulcerative colitis

Reviewer's code: 01514813

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Italy

Author's Country/Territory: China

Manuscript submission date: 2021-02-06

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-02-11 12:55

Reviewer performed review: 2021-02-22 15:43

Review time: 11 Days and 2 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In this study, the AA correlate the analysis of fecal microbiota with the profile of fecal bile acids and the latter with serum pro-inflammatory cytokine in a group of UC patients and control subjects. Furthermore, they quantified the bile acid receptors TGR5 and VDR in mucosal samples. Results show a correlation among fecal microbiota, profile of fecal bile acids and serum pro-inflammatory cytokine. The results of each single analysis are mainly confirmatory of previous studies investigating microbiota composition, fecal bile acids and pro-inflammatory cytokines, nevertheless the observed correlation among them may favor the study of new therapeutic approaches. The study is well conducted, results are clearly described and the discussion adequately examines the strengths and weaknesses of the study itself. Title and abstract reflect the main results of the study.

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 63979

Title: Altered profiles of fecal bile acids correlate with gut microbiota and inflammatory responses in patients with ulcerative colitis

Reviewer's code: 05174548

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor, Research Fellow

Reviewer's Country/Territory: Italy

Author's Country/Territory: China

Manuscript submission date: 2021-02-06

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2021-02-20 16:48

Reviewer performed review: 2021-02-26 15:02

Review time: 5 Days and 22 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Authors studied the role of the faecal bile acids profile and the dysregulation of microbiota in the inflammation pathogenesis in ulcerative colitis. Interestingly, they investigated the relationships between these factors and inflammatory cytokines in UC patients. Despite the small sample size, the results are interesting, and this research field deserves to be explored in future studies as well. However, I have some concerns about the methods. First, to evaluate the pathogenetic role of factors such as intestinal microbiota and faecal bile acids, samples should be prospectively collected in a cohort before and after the diagnosis of ulcerative colitis. Otherwise, it is difficult to establish the causal relationship between the described changes and the onset of IBD. Moreover, in this cohort the disease duration varies greatly among patients, and it is unclear how the changes described may evolve over time. In particular, the time of active disease is not specified. Furthermore, patients had different grades of activity, and no patients in remission were enrolled. Third, UC patients may have different factors affecting the composition of the bacterial flora, such as accelerated intestinal transit time and the use of antibiotics/probiotics. Even if this last was considered an exclusion criterion, the effects of a prolonged antibiotic therapy may last for more than two weeks. Lastly, diet heterogeneity can be a major bias.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 63979

Title: Altered profiles of fecal bile acids correlate with gut microbiota and inflammatory responses in patients with ulcerative colitis

Reviewer's code: 05174548

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor, Research Fellow

Reviewer's Country/Territory: Italy

Author's Country/Territory: China

Manuscript submission date: 2021-02-06

Reviewer chosen by: Man Liu

Reviewer accepted review: 2021-03-24 14:27

Reviewer performed review: 2021-03-28 15:07

Review time: 4 Days

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Authors replied point-by-point amending the manuscript where it was necessary. The manuscript still have some limitations, but is now much improved and ready for publication.