Name of journal: World Journal of Gastroenterology

Manuscript NO: 78544

Title: Curcumin alleviates DSS-induced experimental colitis by a potential mechanism involving memory B cells and the Bcl-6-Syk-BLNK signal

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 02941525

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Professor

Reviewer’s Country/Territory: Italy

Author’s Country/Territory: China

Manuscript submission date: 2022-07-25

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-07-25 14:30

Reviewer performed review: 2022-07-26 05:54

Review time: 15 Hours

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<th>Scientific quality</th>
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<th>[Y] Grade B: Very good</th>
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<th>Conclusion</th>
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SPECIFIC COMMENTS TO AUTHORS
In this paper the effect of curcumin on in an experimental, murine model of ulcerative colitis (SDD) was investigated. Authors concluded that curcumin has anti-inflammatory properties since it may decrease colonoc pro-inflammatory cytokine levels and may modulate the memory B cell response. It is an excellent paper, I have only few minor points to be addressed. 1) Please discuss the effect of curcumin in inflammation-related colorectal cancer. 2) Do Authors think that Bcl-6-Syk-BLNK signal is modulated in colonic lymphocytes or in central, peripheric ones? 3) Numbers of cited articles in bibliography is missing.
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### Manuscript NO: 78544

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### Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

### Peer-review model: Single blind

### Reviewer’s code: 03713791

### Position: Peer Reviewer

### Academic degree: MD

### Professional title: Associate Professor

### Reviewer’s Country/Territory: Italy

### Author’s Country/Territory: China

### Manuscript submission date: 2022-07-25

### Reviewer chosen by: AI Technique

### Reviewer accepted review: 2022-07-25 09:17

### Reviewer performed review: 2022-07-27 15:19

### Review time: 2 Days and 6 Hours

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SPECIFIC COMMENTS TO AUTHORS
In the present basic science article Wei et al showed that curcumin may improve DSS-induced colitis in a murine model by activating memory B-lymphocytes and modulating some proteins involved in Bcl6-Syk-BLNK pathway. Overall, this is a very good study and I have only few minor objections: 1) Lines 319-330: this is not a result, it should be moved in the Introduction. 2) I do not understand why, in “Flow cytometry” paragraph, Authors affirm that spleen was homogeneized while in figures 4-7 “peripheral blood” was mentioned. Please explain. 3) A mention about proapoptotic effect of curcumin is necessary, especially in colorectal cancer.
Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 78544

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Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05264025

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: China

Author’s Country/Territory: China

Manuscript submission date: 2022-07-25

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-07-29 15:45

Reviewer performed review: 2022-08-09 17:30

Review time: 11 Days and 1 Hour

Scientific quality

[ ] Grade A: Excellent  [Y] Grade B: Very good  [ ] Grade C: Good
[ ] Grade D: Fair  [ ] Grade E: Do not publish

Language quality

[ ] Grade A: Priority publishing  [Y] Grade B: Minor language polishing
[ ] Grade C: A great deal of language polishing  [ ] Grade D: Rejection

Conclusion

[ ] Accept (High priority)  [ ] Accept (General priority)
[ Y] Minor revision  [ ] Major revision  [ ] Rejection

Re-review

[ ] Yes  [Y] No
SPECIFIC COMMENTS TO AUTHORS

Colitis is a common disease that seriously endangers human health and has a high incidence. The treatment effect of existing colitis drugs is not ideal. Therefore, it is of great significance to develop new colitis drugs with good curative effect and small side effects. Curcumin is a natural polyphenolic compound, which has been proved to have many pharmacological effects such as anti-oxidation, anti-tumor and anti-inflammation, and has little side effects. It is a promising drug for colitis treatment, but the mechanism of curcumin's anti-colitis action has not been revealed. This article entitled Curcumin alleviates DSS-induced experimental colitis by a potential mechanism involving the memory B cells and the In the paper of Bcl-6-SYk-BLNK Signal, the therapeutic effect of curcumin on DSS-induced colitis in mice and its effect on Bcl-6-SYk-BLNK signaling pathway in memory B cells were studied, and some valuable results were obtained, which laid a necessary foundation for the final elucidation of the mechanism of curcumin anti-colitis. This is an important and interesting study, but the paper needs to be revised and refined before it can be accepted. Some of the changes need to be made are as follows.  

1. Line231: Please supplement the lot number of curcumin.  
2. Line 249: pH = 7.2 can be directly written in the common form pH7.2.  
3. Line251: Please provide the model of tissue slicer.  
4. Line153: Curcumin Cur should be written with the full name curcumin first and then with the short name Cur.  
5. Line254: Please supplement the model of Leica microscope.  
6. Line261, Cell Medium RPMI (Roswell Park Memorial Institute) 1640, which can be simplified to the generic medium name RPMI-1640.  
7. Line288, please supplement the batch number of total protein detection kit and antibody and other reagents.