

### PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 82639

Title: Molecular signalling during cross talk between gut brain axis regulation and

progression of irritable bowel syndrome: A comprehensive review

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03733303 Position: Peer Reviewer Academic degree: MD

**Professional title:** Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: India

Manuscript submission date: 2022-12-24

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-12-25 02:28

Reviewer performed review: 2023-01-02 09:02

**Review time:** 8 Days and 6 Hours

	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C:
Scientific quality	Good
	[ Y] Grade D: Fair [ ] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair
this manuscript	[ ] Grade D: No creativity or innovation



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Scientific significance of the	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair
conclusion in this manuscript	[ ] Grade D: No scientific significance
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)
	[ ] Minor revision [ <mark>Y</mark> ] Major revision [ ] Rejection
Re-review	[Y]Yes [ ]No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [ Y] No

### SPECIFIC COMMENTS TO AUTHORS

This review focused on the role of brain-gut-microbiota axis in the irritable bowel syndrome. The review stressed the role of microbiota in the gut-brain interactions. Besides, role of signal transducing cells such as enterochromaffine cells (EC) and dendritic cells (DC) has also been illustrated. Then the author gave a detailed presentation of IBS pathogenesis. Though interesting, the review had several limatations. 1) the structrue of the review should be improved. in my opinion, the author should gave a illustration about IBS first, and then focused on the role of brain-gut-microbiota axis in the pathogenesis of irritable bowel syndrome. 2) the review should have a specific topic. For example, in this review, the author talked about the genetic constructions of IBS, which seemed have no association with the brain-gut-microbiota 3) Some figures, such as Fig. 2, are not very clearly presented.



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Provenance and peer review: Invited 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: India

Manuscript submission date: 2022-12-24

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-03-16 09:01

Reviewer performed review: 2023-03-20 16:08

**Review time:** 4 Days and 7 Hours

Scientific quality	[Y] Grade A: Excellent [] Grade B: Very good [] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [ Y] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No creativity or innovation



Scientific significance of the conclusion in this manuscript	[ Y] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[Y] Grade A: Priority publishing [] 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	[Y]Yes []No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous  Conflicts-of-Interest: [ ] Yes [Y] No

### SPECIFIC COMMENTS TO AUTHORS

The present review article by Singh et al is mainly focused on the crosstalk between gut and brain and its axis, in patients with irritable bowel syndrome (IBS). The review is well written and the topic was analyzed in depth. My only observation is that Authors focused their attention mainly on dopamine and serotonin. However a mention to histamine is necessary, since it has bee observed an increased mastocyte infiltration and degranulation close to sensitive nerves in IBS population (see Barbara G et al, Gastroenterology 2007). Minor issues: 1) In the legend of figure 1 there are some acronyms that have not been fully explained (ANS, HPA, ECC, ICC, SMC). 2) cajal - - > Cajal.



# RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 82639

Title: Molecular signalling during cross talk between gut brain axis regulation and

progression of irritable bowel syndrome: A comprehensive review

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03733303 Position: Peer Reviewer Academic degree: MD

**Professional title:** Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: India

Manuscript submission date: 2022-12-24

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2023-05-10 02:44

Reviewer performed review: 2023-05-18 15:24

**Review time:** 8 Days and 12 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Peer-reviewer	Peer-Review: [Y] Anonymous [ ] Onymous



statements

Conflicts-of-Interest: [ ] Yes [Y] No

# SPECIFIC COMMENTS TO AUTHORS

All the issues have been addressed, I have no further questions.