

Replies to the reviewers.

We appreciate and thank the reviewers for the comments.

- Reviewer's code: 03529755

"I read the article carefully; I would like to congratulate all the authors of this paper. It is an important topic about gastrointestinal system. Nowadays it is clearly understood the relation between brain and intestine. Microbiota plays an important role in this pathway".

Response: Thank you so much for your review and encouraging comments.

- Reviewer's code: 02536349

"The term "H,K-ATPase" seems not universal. Instead H⁺/K⁺-ATPase or HK-ATPase may be preferred. 1 Title. The manuscript titled "Proton pump inhibitors and dysbiosis: Current knowledge and aspects to be clarified" has appropriate title with the manuscript. 2 Abstract. The abstract adequately summarize and reflect the work described in the manuscript. 3 Key words. The key words reflect the focus of the manuscript. 4 Background. Logical and well-documented background. 5 Methods. Methods are sufficient. 6 Results. Results have taken attention to the negative changes in microbiota related to unbalanced external iatrogenic influences (eg PPIs in this case). 7 Discussion. The aim has been well reviewed. 8 Illustrations and tables. Presentable 9 Biostatistics. No special need for statistics in this review. 11 References. Organised and shown in appropriate parts. Quality of manuscript organization and presentation. The quality is well, concisely and coherently organized and presented. The ethics, style, language and grammar accurate and appropriate."

Response: As suggested, we change the term "H,K-ATPase" with "H⁺/K⁺-ATPase".

Thank you so much your review and encouraging comments.

- Reviewer's code: 03723215

"Thanks to authors for submitting concise and well structured review".

Response: Thank you so much for your review and encouraging comments.

- Reviewer's code: 02841708

“Author provided detailed data to verify his opinion, and it is of significance to doctors”.

Response: Thank you so much for your review and encouraging comments.

- Reviewer’s code: 00039470

“Well written, up-to-date and comprehensive review”.

Response: Thank you so much for your review and encouraging comments.

Kind Regards

Giovanni Bruno