

Responds to the reviewer's comments:

General response: Thank you very much for your comments and advice on our manuscript. We have resubmitted new version accordance with your recommendations. Those comments are all valuable and very helpful for revising and improving our paper. The detailed point-by-point responses are listed below

Reviewer #1: Specific Comments to Authors: This is an interesting study of the influence of Group B Streptococcus and vaginal cleanliness on the vaginal microbiome of pregnant women. The study is well designed and the manuscript is well written. In this study, the authors found that Group B Streptococcus status and vaginal cleanliness significantly affect vaginal microbiome differences in pregnant women. This study provides some instructional information for treatment of different GBS statuses and vaginal cleanliness of pregnant women. The reviewer recommends to accept this manuscript after an editing. The authors should improve the manuscript carefully according to the guideline of the journals.

Reply 1: We feel great thanks for your professional review work on our article. In this study, we successfully identified a novel landscape in which GBS status and vaginal cleanliness significantly affected vaginal microbiome differences in pregnant women. In our new version, we have modified our manuscript according to the guideline of the journals.

Reviewer #2: Specific Comments to Authors: Group B Streptococcus is a gram-positive bacterium that transiently and asymptotically colonizes the vagina and gastrointestinal tracts of healthy women. And it is the principal reason for invasive bacterial disorders in newborns and lethal diseases in infants. The correlation of GBS status and vaginal cleanliness with the vaginal microbiome is still obscure. This study designed to investigate the effects of GBS status and vaginal cleanliness on the vaginal microbiome of pregnant women. The aim of the study is clear, the methods are described in detail.

Comments: 1. The abstract should be revised. This section should be divided to background, methods, results and conclusion. 2. Some minor language polishing should be corrected. 3. The reference list seems repeated, please check, and make an update.

Reply 2: We would like to thank you for this constructive comment. In our new manuscript, the abstract had been divided to background, methods, results and conclusion. And we updated the reference list and deleted the repeated reference. After revising our manuscript, we did language polishing again. We hope it could meet the standard of the journals.

EDITORIAL OFFICE'S COMMENTS

Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022. Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial

intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at:

<https://www.referencecitationanalysis.com/>.

Reply to editorial office's comments: Thanks so much for your carefully and professional work. We have prepared and arranged the figures using PowerPoint in this version and we add the copyright information to the bottom right-hand side of the picture in PPT according to your indication. In addition, we used RCA database to search the latest cutting-edge research results. Although there not many studies focused on the effects of GBS status and vaginal cleanliness on vaginal microecosystems, we still found one study in which they assessed positive GBS clinical cultivation, and found a limited number of differentially abundant taxa, including an increased enrichment of *Ureaplasma urealyticum*, *Corynebacterium glucuronolyticum*, *Propionibacterium acnes*, and *Haemophilus haemolyticus*. We have cited this reference in our new manuscript. Thanks again for your professional work!