

Responses to the reviewers

Reviewer #1: **Scientific Quality:** Grade C (Good) **Language Quality:** Grade B (Minor language polishing) **Conclusion:** Minor revision **Specific Comments to Authors:** This article has described the nested PCR method for *H. pylori* detection. This manuscript provides new information and well written on *H. pylori* detection methods. Please, describe more detailed explanation of Figure 1. Figure 2 seems to show a repeating sequence. Consider showing the necessary parts of the picture. In the last part of manuscript, Spelling error was found. “Besides sensitivity and specificity another advantage is that it can be used to verify the presence of *H. pylori* .. “ : specificity -> specificity Thank you.

Thank you for the comments and suggestions. We improved Figure 1 and 2 legend. Repeated sequences in Figure 2 came from different bacterial species and these are the regions of identity.

Reviewer #2: **Scientific Quality:** Grade C (Good) **Language Quality:** Grade B (Minor language polishing) **Conclusion:** Minor revision **Specific Comments to Authors:** This manuscript is well written, and is worth reading. English: Acceptable, but to be revised. Add a table of abbreviations. It helps read quickly this manuscript. The *glmM* gene is essential for the development of the cell wall in bacteria as well as for the growth of the microorganism, and this gene has been extensively used for confirming the presence of *H. pylori*. however, the authors was not mentioned about the *glmM*-PCR based assay for detection of *H. pylori*!! please discuss about the *glmM* and comparison with nested-PCR (accuracy and precision percentage). More latest published articles should be cited as references. Figure legends were not sufficient, please more explain

Thank you for the comments and suggestions. We added the table of abbreviations (Table 3). We also rewrote the part about the *ureC/glmM*-PCR based assay for detection of *H. pylori* and updated some references. Also, the figure legends were improved.

Dear editor

We edited and fixed second version of the invited “Frontier” article to the World Journal of Gastroenterology that was reclassified to “Minireview”. Enclosed please find the revised version of manuscript entitled “DNA diagnostics for reliable and universal identification of *Helicobacter pylori*” that was edited according to reviewers’ comments. In addition, I would like to inform you that Dr. Barbora Šeligová has married and accepted the surname of her husband Šípková. She also decided to use it in her future scientific career. Furthermore, we did not receive the APVV *Helicobacter* grant, but we received other funding PP-COVID-20-0051 to support MS. Also due to the minor changes we did not used

proofreading services to polish our English. Hopefully we met criteria. We do appreciate in advance your effort.

Best Regards,

Pavol Sulo