Editorial Office
BMC Clinical Pathology

Dear Editor,

We would like to resubmit our revised manuscript entitled “Utilizing BD MAX Enteric Bacterial Panel to Detect Stool Pathogens from Rectal Swabs” for consideration for publication in BMC Clinical Pathology.

In this short communication manuscript, we evaluated the BD MAX™ Enteric Bacterial Panel for use with rectal swabs to detect enteric bacterial pathogens. The results of the Enteric Bacterial Panel were compared to those of traditional stool cultures from rectal swabs.
This manuscript has been revised to include additional testing methodology and performance characteristics of the Enteric Bacterial Panel. Moreover, the conclusion has been modified per the reviewer’s request. A point-by-point response to reviewers’ comments can be found below.

This manuscript has not been submitted or accepted elsewhere. All authors have contributed significantly to and seen the manuscript and approved of its content.

We thank you for your consideration and look forward to receiving comments from your reviewers.

Sincerely,

Joel Mortensen, PhD
Professor

Reviewer #1: Review of manuscript: DPAT-D-16-00036

DeBurger et al. report on the comparison of BD MAX™ Enteric Bacterial Panel (PCR) and culture from rectal swabs regarding the detection of enteropathogenic bacteria.

Comments

1. The authors have convincingly shown that PCR from swabs is more sensitive than culture from swabs. They have not shown that PCR from swabs is equally sensitive as culture from optimal sample material (3 fresh stool samples as described above). Therefore, the conclusion
that rectal swabs would be acceptable samples for detecting enteropathogenic bacteria cannot be drawn from the results, because an appropriate control reflecting the present culture-based diagnostic gold standard is missing in this assessment. A conclusion that can be drawn is that PCR from swabs is more sensitive than culture from swabs, if no good sample material can be provided.

Response: The authors agree that swabs are suboptimal specimen for stool culture. However, both the Clinical Microbiology Procedures Handbook and Manual of Clinical Microbiology indicate rectal swabs are acceptable specimen for pediatric patients as referenced in the manuscript. The conclusion has been worded to clearly indicate that PCR from swabs is more sensitive than culture from swabs, if more appropriate sample material can not be provided.

2. Beside the above mentioned general point, sensitivity of swabs can show large differences depending on the used product as recently shown for nasal swabs. If respective data are available in literature, the authors should comment on the sensitivity of the swabs that were used in their study.

Response: The authors wish to thank the reviewer for suggesting a comment on the sensitivity of swabs. A short paragraph on the importance of swab types has been added to the Discussion section. This group is considering a study examining the differences in swabs.

Reviewer #2:

Comments

1. In the methods section, authors stated that “Testing of SBT was carried out with the BDM-EBP according to the manufacturer’s package insert”. Please give more details in this study how BDM-EBP was exactly performed.
Response: The BDM EBP is a relatively simple platform where everything takes place inside the machine. The sentence has been clarified to indicate such.

2. What was the gold standard to assess the performance of BDM-EBP? Moreover, it should also be interesting to give more detail about Sensitivity, Specificity, PPV and NPV of BDM-EBP according to this gold standard.

Response: The gold standard to assess the performance of BDM EBP was stool culture. The Positive Percent Agreement and Negative Percent Agreement statistics comparing stool cultures to BD MAX EBP of a large multicenter study [3] have been added to the Background section of the manuscript.

3. In conclusions, how interesting are BDM-EBP for prompt diarrhea treatment according to identified bacteria (i.e. how much time it needs to perform the test)?

Response: The additional information has been added.