

Utility of multiplex real-time polymerase chain reaction for the detection of bacteria from sputum samples of community acquired pneumonia patients in Dhaka, Bangladesh

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Editor's comments (7 March 2023)		Author's response (22-Mar-23)
<p>1. The manuscript needs a MAJOR revision. Kindly use the Admin checklist attached to revise it. All points given in the checklist and those given below must be addressed. The manuscript could be consolidated around the main message of the study.</p> <p>2. The Objective should be written in measurable terms. The meaning of "To investigate" remains vague.</p> <p>3. Results analysis" mentioned in the Methods section is confusing. Is it Results or analysis? Please revise it.</p> <p>4. The legends of Figure 1–4; describe the axes. These should be made clear in the axes themselves.</p> <p>5. Statistical analysis states that sensitivity, specificity, and predictive values were used. But there are no such results presented. For such analysis, a gold standard should be used to compare the performance of a test. Which one is the study's gold standard?</p>		<p>1. The admin checklist has been used to revise the manuscript and manuscript was arranged according to it and all the Editor's and Reviewer's comments were also addressed and the responses to them are written below in detail.</p> <p>2. The wording has been changed for the objective to: "to evaluate" (Lines 52, 156).</p> <p>3. The wording has been changed in the 'Methods' section to: "Result interpretation of multiplex real-time PCR assay" (Line 262).</p> <p>4. In Figures 1 to 4: The X and Y axes have been labeled. The new Figures have been added to the main manuscript (Figures 1 to 4, in Pages 23 to 26) and sent as attachments in jpg format with this email.</p> <p>5. In the 'Methods': the following has been added to clarify the statistics of the study: (Lines: 281 to 287). <i>"The results of multiplex real-time PCR were compared with culture, Gram stain and serology. The efficacy of multiplex real-time PCR in comparison to culture (the gold standard method) and Gram stain was determined by calculating the diagnostic parameters: sensitivity, specificity, positive predictive value and negative predictive value by using standard equations."</i> The gold standard for this study was 'culture'.</p>
Editor's Decision	<p>a. Minor revision</p> <p>b. Major revision</p> <p>c. Reject</p>	<p>✓</p>

Reviewer's comments		Author's response	
Date review assigned	01.12.22	Date sent to author	07-Mar-23
Date review returned	12.01.23	Date received from author	22-Mar-23
Reviewer name, affiliation, email, ORCID	Prof Md Mujibur Rahman mmrahman61@gmail.com 0000-0002-4381-1511		
Conflict of interest of the reviewer	None		
Please write Yes or No		Please write a response if the reviewer's comment is No. You must change the manuscript as per your response. Mention line numbers.	
1. Is the research question or study objective clearly defined in measurable terms?	Yes		
2. Is the abstract accurate, balanced and complete?	Yes		

3.	Is the study design appropriate to answer the research question or achieve objective?	No	The objective has revised based on the design of the study.
4.	Are the Methods described sufficiently to allow others to repeat it?	No	The Methods section has been revised and the issues with statistics were corrected (Lines: 281 to 287). All laboratory methods were described in detail and references for the procedures were given so that other researchers can repeat it (Lines: 161 to 287).
5.	Are the operational definitions and ascertainment of key variables given adequately?	Yes	
6.	Are the outcomes clearly defined?	Yes	
7.	Are statistics used appropriately and described fully?	No	The statistical analysis section has been revised (Lines: 281 to 287).
8.	Do the Results address the research question or objective clearly?	No	The results section has revised focusing the main objective of the study (Lines: 428 to 433).
9.	Are the tables and figures clear and appropriate to address the objective or research question?	No	The tables and figures were revised and all moved to the end of the manuscript. Figure corrections also done (mentioned above in Response to Editor's comment 4).
10.	Does the Discussion cover the main points of the paper?	No	Main points/ findings of the study have been covered in the Discussion (Lines: 352 to 383, 414 to 456).
11.	Are the strengths and limitations addressed?	No	In the Discussion, strengths (Lines 414 to 415, 428 to 433, 441, 450) and limitations (Lines 371 to 383, 404 to 413, 423 to 426) have been revised.
12.	Are the conclusions justified by the results	No	Conclusion was modified to justify the results (Lines: 453 to 456).
13.	Are the references up-to-date, and appropriate?	No	References have been checked and updated.
14.	Is the standard of written English acceptable for publication?	Yes	
15. Descriptive comments to the authors (Divide it into MAJOR and MINOR points).			Respond and reflect it in your manuscript. If you refute, justify your argument using references. Mention line numbers.
The theme of the study is very important and has important clinical significance for our clinicians. So, the study may be accepted after addressing the issues discussed.			
1.	The study was done in the three hospitals of Dhaka city and tried to conclude about the situation of the whole country.		1. The title of the article/manuscript (Line: 4 and 5) and parts of the article (Lines 155 to 160) the language has been changed to address this issue.
2.	Significant plagiarism is found in the introduction. The descriptions should be rephrased.		2. The entire introduction section of the manuscript /article has been rephrased and modified and references were also updated (Lines: 124 to 160).
3.	The table of the method section has merged with the tables of the results this should be taken care of.		3. Tables has been corrected. All tables and figures are placed at the end of the article (From Pages 20 to 27).
4.	Some writing issues are there like grammar and spelling		4. All the grammar and spelling issues have been corrected to the best of our ability and knowledge.
16. Reviewer's Recommendation (Tick mark on the open boxes to the right)		d. Minor revision	
		e. Major revision	√
		f. Reject	

Second round

Executive Editor's comments (05-Apr-23)	Author's response (08-Apr-23)
<p>Please address the following points in your manuscript:</p> <ol style="list-style-type: none">1. For an original article, the maximum word count for main text is 3000 and references are 40. Please reduce the word counts and references.2. Reduce the word count for abstract into 250 maximum.3. The manuscript has six tables and five figures. Reduce into maximum of six (tables and figures) for original articles.	<ol style="list-style-type: none">1. Reduced word count below 3000 as per journal's rules.2. Reduced word in abstract as possible.3. Reduced table number by merging. Now total 5 tables and 1 figure.