

Peer Review File

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**Reviewer Comments**

This prospective study investigated the diagnostic value of PCT for bacterial infection in DKA patients. The study is well designed, and the results are interesting. I have some comments:

Comment 1: The citation number in the main text is incorrect. Please correct it.

Reply 1: The citation numbers have been corrected

Changes in Text: None required

Comment 2: ROC curve analysis should be indicated in the statistical methods section.

Reply 2: Analysis now included in the statistical methods section

Changes in text: Sensitivity, specificity, positive predictive values, negative predictive values, receiver operating characteristic curves (ROC), and areas under the curves (AUC) were calculated.

Comment 3: I suggest the authors add the numbers of true positive, false negative, true negative and false positive in the flowchart. It can enhance the readability of the manuscript.

Reply 3: Unclear as to where in the manuscript this information is request

Changes in text: None

Comment 4: Results section: the 95% confidence interval of sensitivity and specificity should be reported.

Reply 4: 95% CI for Sens and Specificity are added to the manuscript

Changes in text: Sensitivity for PCT in DKA was 78% (95% CI 0.57 – 1.00) and specificity was 45.8% (95% CI 0.34 – 0.57).

Comment 5: Results section: the specificity should be 54.2% rather than 45.8%. Please check it.

Reply 5: The previous manuscript did not include sensitivity or specificity- we are unsure of where the reviewer found this number. Calculated sensitivity and specificity are added to the results section.

Changes to text: Sensitivity for PCT in DKA was 78% and specificity was 45.8%.

Comment 6: The sensitivity and specificity should be reported in the abstract section.

Reply 6: Added to abstract

Changes to text: Sensitivity for PCT in DKA was 78% and specificity was 45.8%.

Comment 7: The manuscript should follow the STARD guideline rather than the STROBE guideline. This issue should be reported in the main text.

Reply 7: STARD Checklist is provided. Methods analysis section is updated with a statement to reflect this methodology.

Changes to text: This study results are reported using the STARD 2015 guideline for diagnostic accuracy studies.

Comment 8: Introduction section: Several randomized controlled trials have found that measurement of PCT can be used to successfully shorten the duration of antimicrobial therapy in sepsis and lower respiratory tract infections. This sentence should be revised as: Several randomized controlled trials have found that procalcitonin-guided antibiotic therapy can successfully shorten the duration of antimicrobial therapy in sepsis and lower respiratory tract infections.

Reply 8: Change confirmed

Changes to text: above sentence changed to now read: Several randomized controlled trials have found that procalcitonin-guided antibiotic therapy can successfully shorten the duration of antimicrobial therapy in sepsis and lower respiratory tract infections.

Comment 9: Please check the figures. There are two figures named figure 2.

Reply 9: Within text there is no duplication. There is a table 1 and 2 and figure 1 and 2 which may have led to confusion. Note the list below and confirm on the last page of manuscript.

Figure 1: PBI vs. Non-PBI

Table 1: Baseline characteristics

Table 2: Primary Outcome

Figure 2: Admission PCT by PBI status

Figure 3: Statistical correlation information

Figure 4: Characteristic Curve

Changes to text: None