ISSN(O): 3107-7889

Jana Nexus: Journal of Health and Medicine

Publisher's Name: Jana Publication and Research LLP

https://www.jananexushm.com

REVIEWER'S REPORT

Manuscript No.: JNHM-183

Title: Sequence-Based Characterization of blaNDM and mrkD in Clinical Klebsiella pneumoniae Isolates from Babylon, Iraq: Sanger Sequencing and Phylogenetic Analysis.

Recommendation:

Accept as it is .....
Accept after minor revision.....
✓ Accept after major revision .....
Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance	✓			

Reviewer Name: Dr S. K. Nath

Detailed Reviewer's Report

Strength of the study:

- Addresses clinically important antimicrobial resistance and bacterial virulence genes.
- Examines 35 clinical Klebsiella pneumoniae isolates from three hospitals.
- Uses PCR screening followed by bidirectional Sanger sequencing.
- Reports high detection rates of blaNDM and mrkD.
- Includes nucleotide alignments, chromatograms and phylogenetic analysis.
- Discusses the importance of gene detection in infection control.
- Acknowledges the limitations of short sequence fragments and limited representative samples.

Weakness of the study:

- The sample size is small and limited to three hospitals.
- The study period and distribution of isolates by specimen are not reported.
- Only three representative sequences were analysed for each gene.
- GenBank accession numbers and sequence coverage details are missing.
- Phylogenetic analysis methods are not sufficiently described.
- Antibiotic susceptibility testing was not included.
- Some results and interpretations extend beyond the sequenced samples.
- Several methodological instructions and editing notes remain in the manuscript.

Reviewers Comments:

The manuscript addresses an important topic in antimicrobial resistance and provides preliminary molecular information on blaNDM and mrkD in clinical Klebsiella pneumoniae isolates. PCR screening and Sanger sequencing are useful features, and the gel images and sequence alignments support the presentation. However, important methodological details require clarification. Only three representative sequences were analysed, so the phylogenetic findings cannot be generalized to all 35 isolates. GenBank accession numbers, sequence coverage, alignment settings, evolutionary model and branch-support values should be provided. The authors should also clarify the study period and specimen distribution. The absence of antibiotic susceptibility testing limits the interpretation of blaNDM detection in relation to actual carbapenem resistance. Ethical approval is mentioned with an approval number, but the statement still requires confirmation against the official document. The manuscript contains grammatical errors, inconsistent terminology, incomplete sentences and visible editorial instructions that must be removed. Overall, the study has potential but requires substantial methodological and editorial revision.

ISSN(O): 3107-7889
Jana Nexus: Journal of Health and Medicine
Publisher's Name: Jana Publication and Research LLP
https://www.jananexushm.com

REVIEWER'S REPORT

Previously Published anywhere/Plagiarism check:
A web search did not identify an exact match for the submitted title. However, related studies have already investigated blaNDM and antimicrobial resistance in Klebsiella pneumoniae from Iraq, including clinical isolates from Babylon and other regions. These publications do not establish plagiarism. The authors should clarify the novelty of the combined blaNDM and mrkD sequencing approach and complete a formal similarity check before publication.