

## REVIEWER'S REPORT

Manuscript No.: IJAR- 51829

Date: 23/05/2025

**Title:** "SHORT-DURATION VERSUS LONG-DURATION ANTIBIOTIC THERAPY FOR HEALTHCARE-ASSOCIATED PNEUMONIA IN INTENSIVE CARE UNITS"

### 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

Date: 24/05/2025

### Reviewer's Comment for Publication:

This study provides compelling evidence that a 7-day course of antibiotics is non-inferior to a 14-day regimen in ICU patients with healthcare-associated pneumonia who show early clinical stability. The findings support adopting shorter durations to reduce antibiotic resistance and adverse effects, contributing to antimicrobial stewardship efforts. However, caution is advised in applying these results broadly, especially in high-risk or immunocompromised populations. Further research with extended follow-up and inclusion of diverse patient groups is necessary to solidify these recommendations.

## Reviewer's Comment / Report

### Strengths:

- **Robust Study Design:** The study is a multicenter, randomized controlled trial with a sizable sample of 400 ICU patients, which enhances the reliability of the findings.
- **Clinical Relevance:** Addresses a critical issue in ICU care—optimal antibiotic duration—potentially impacting antimicrobial stewardship and resistance.
- **Clear Outcomes:** The primary endpoint (clinical cure at day 14) and secondary endpoints (resistance development, adverse events, ICU length of stay) are well-defined.
- **Evidence for Practice Change:** Demonstrates that shorter antibiotic courses (7 days) are non-inferior to traditional longer courses, supporting a paradigm shift in treatment protocols.
- **Additional Benefits:** The shorter course is associated with fewer adverse events and resistant organisms, aligning with antimicrobial stewardship goals.

### Weaknesses:

- **Limited Generalizability:** Exclusion of immunocompromised patients and those with multidrug-resistant infections limits applicability to all ICU populations.
- **Follow-Up Duration:** The follow-up period was only 28 days, which may be insufficient to assess long-term outcomes such as late relapse or resistance emergence.
- **Selection Bias and Variability:** As a retrospective observational study (despite claims of being randomized), there may be inherent biases, and variation in microbiological practices across centers could influence results.
- **Open-Label Design:** Lack of blinding could introduce bias, although objective endpoints mitigate this concern.
- **Need for Biomarkers:** The study suggests potential for biomarkers like procalcitonin to guide therapy but does not incorporate them.