

Abstract guidelines for the 2019 Resident Research Virtual Poster Session

Template guidelines: Arial or Calibri font, 12-point size, 1 inch margins on all sides. There is a 250-word limit for all abstract content (sections 2-5 above). Abstract files should be saved as "Resident Abstract - First initialLast name.docx" (example: Resident Abstract – SPass.docx)

All submissions should follow the structured abstract format with the following distinct sections:

1. Title and Author / Institution Information
2. Introduction
3. Methods
4. Results
5. Conclusion

The abstract title should be in all caps, bold-type text. Each author should be listed as name only [first name last name], with no credentials. The presenting author should be underlined. Each sub-heading should be in all caps, bold-type text, with the main text of the section in regular font.

EXAMPLE:

IMPACT OF PROCALCITONIN IN THE TREATMENT OF PNEUMONIA IN A MEDICAL ICU.

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INTRODUCTION: The use of biomarkers, such as procalcitonin, has shown to have a positive impact on antibiotic stewardship.

METHODS: We conducted a retrospective cohort study comparing the use of procalcitonin levels (PCT) versus no procalcitonin levels (No-PCT) in patients admitted to our MICU with diagnosis of pneumonia. The primary outcome of the study was the duration of antibiotic therapy. Secondary outcomes were the rate of initiation, discontinuation, escalation and de-escalation of antibiotic(s), appropriateness and accuracy of therapy, length of hospital stay, 28-day death and re-infection.

RESULTS: A total of 141 patients were included in the study (PCT = 60, No-PCT = 81). Healthcare-associated pneumonia was most prevalent pneumonia (63.3% in PCT, 50.6% in No-PCT). Thirty-seven patients (61.7%) in the PCT and 60 patients (74.1%) in No-PCT had a co-infection, most commonly bacteremia and urinary tract infections. The total antibiotic duration in PCT was 10 days versus 11 days in No-PCT ($p=0.94$). No-PCT had higher rate of escalation (26.7% vs 35.8%, $p=0.25$) and lower rate of de-escalation (55% vs 44%, $p=0.4$). Clinical outcomes were non-significant with exception of mortality (PCT 13.3% vs No-PCT 28.4%, $p=0.03$). PCT had a longer length of ICU (10.5 days vs 7 days, $p=0.25$) and hospital LOS (17 days vs 15 days, $p=0.24$), and a lower incidence of antibiotic-associated adverse events (5% vs 8.6%, $p=0.4$) and re-admission rate (21.2% vs 34.5%, $p=0.55$).

CONCLUSIONS: The findings of the study indicate the use of PCT is associated with a trend towards less likelihood of escalation of therapy, higher likelihood and more rapid use of de-escalation of therapy, lower re-admission and mortality rates, and less antibiotic-associated adverse events. Subgroup analysis of patients with acute kidney failure, chronic kidney failure, and heart failure is currently pending.