

# KASIC NEWSLETTER

Issue Two, Volume Three

Pictured Top: Monticello, KY  
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KASIC



## Finding the BALANCE in Treating Bacteremia

### **The BALANCE Trial**

IDWeek 2024 was this month with the hottest antimicrobial stewardship news being the results of the BALANCE trial: a large, randomized controlled trial comparing 90-day mortality in hospitalized patients with bloodstream infections receiving 7 vs 14 days of antibiotics.

#### **Excluded Patients**

Pertinent exclusion criteria were severe immunocompromise, prosthetic heart valve, syndrome with well-defined requirement for prolonged treatment, single positive blood culture with common contaminant, *Staphylococcus aureus*, and *Candida* or other fungus.

#### **Enrolled Patients**

Across 74 hospitals in 7 countries, 3608 hospitalized patients having a positive blood culture with a pathogenic bacteria (1814 in 7-day arm and 1794 in 14-day arm) were included. At enrollment, 55% patients were in ICU, 21% had solid organ cancer, and 12% had immunosuppression.

### **Bacteremia Details**

Most common sources of bacteremia were UTI (42.2%), abdomen (18.8%), lung (13%), vascular (6.3%), and SSTI (5.2%). The most common pathogens were *Escherichia coli* (43.8%), *Klebsiella* spp. (15.3%), *Enterococcus* spp. (6.9%), CoNS (4.8%), *Pseudomonas* spp. (4.7%), *Streptococcus pneumoniae* (4.5%), and *Enterobacter* spp. (4.4%).

### **Results**

The primary outcome of 90-day mortality occurred in 14.5% patients receiving 7-day vs 16.1% receiving 14-day treatment (absolute difference -1.6% [95.7% CI -4 to 0.8]) demonstrating non-inferiority. Secondary outcomes include in-hospital mortality, ICU mortality, length of stay (LOS) in hospital, LOS in ICU, and bacteremia relapse were not different between two groups. This study suggested that treating bacteremic hospitalized patients with 7 days of antibiotics is non-inferior to 14 days of therapy.

Daneman, N., Fowler, R, et al. (2024, October 15-19). 7 versus 14 days of antibiotic treatment for patients with bloodstream infections [Conference abstract presentation]. IDWeek 2024, Los Angeles, CA, United States.



## KASIC Cases

Each week, a fictional case describing a common antimicrobial stewardship opportunity is posted on X (formerly Twitter) and LinkedIn. Participants are encouraged to answer the poll first and then review the best answer along with an explanation.

**Ready to test your antimicrobial stewardship knowledge?**

**Try out the latest case:**

A woman presents to the hospital with uncomplicated appendicitis. She had a laparoscopic appendectomy yesterday.

When should antibiotics be stopped?

- A. 14 days total
- B. 4 days post-op
- C. 24-48 hours post-op
- D. Now!

[Click here for the BEST answer](#)

[Read more cases here](#)

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## New Strategy to Reduce *C. difficile* Recurrence

Approximately 1 in every 4-5 patients will experience recurrent CDI after initial therapy. Longer vancomycin tapers and/or pulsed regimens are recommended in recurrent disease to decrease risk of recurrences, but limited data supports their use as initial therapy. In a new retrospective propensity-score matched cohort [study](#) published in Infection Control and Healthcare Epidemiology, authors found that a 12 week vancomycin taper for initial CDI episode was associated with reduced recurrences (5.3%) when compared with standard vancomycin courses of 10-14 days (28%). A double-blinded, placebo-controlled, randomized controlled [trial](#) comparing a 4 week vancomycin taper to standard 14 day course vancomycin in initial CDI is on-going.

[Click here to read the full article](#)

## Latest Clinical Education Pearls: Click to Read!

[Antibiotics in AECOPD](#)

[Fosfomycin: An Option for Pyelonephritis?](#)

[Pre-op Pee, Let it Be!](#)

[Flagging Flagyl + Alcohol: Contraindication or Just Bad Taste?](#)

[Why Prolong a Beta-Lactam?](#)

## Norton Infectious Diseases Institute Grand Rounds Educational Series

[Deja Poo: Tackling the Cycle of Recurrent \*C. difficile\*](#)

[Hazards of Working in a Microbiology Lab](#)

[Malaria](#)

[Click here for Grand Rounds Information](#)