



Gram-Negative Bacteremia: Shorter is Better

Each day of additional antibiotics is associated with an increased risk for new resistance development, adverse drug event, and *C. difficile* infection ([see KASIC Pearl: Every Dose Matters](#)).¹⁻³ Therefore, the shortest effective duration should be used whenever possible. When it comes to uncomplicated gram-negative bacteremia, what is the shortest, effective duration?

Is 7 days enough for gram-negative bacteremia?

Yes! Several randomized controlled trials have compared 7 days to 14 days for uncomplicated gram-negative bacteremia. Collectively, these studies have found non-inferior rates of mortality, clinical failure, readmissions, and duration of hospitalization with 7 days of therapy compared with 14 days of therapy.⁴⁻⁶

Should duration start from the first day of antibiotics or first day of negative blood cultures?

Day 1 of therapy was defined as the first day of microbiologically active therapy and NOT the first day of negative blood cultures in all studies comparing 7 days to 14 days.⁴⁻⁶ Routinely repeating blood cultures in uncomplicated gram-negative bacteremia is not necessary.⁷

Key Takeaway: Treat uncomplicated gram-negative bacteremia for 7 days. Count duration of therapy from first day of active antibiotics, NOT first day of negative blood cultures.

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