

CONNECTING THE DOTS: TRIMMING ANTIBIOTIC DURATION, NOT EFFICACY

Stephanie Harding, PharmD, BCIDP, BCPS, FIDSA

Infectious Diseases Clinical Pharmacist
Wesley Medical Center
Wichita, KS

KPhA works with the Kentucky Pharmacy Education and Research Foundation, Inc. to certify its courses. ACPE UAN 0143-9999-26-065-L01-P/T
KPERF is accredited by ACPE as a provider of continuing pharmacy education.

DISCLOSURES

Faculty

Stephanie Harding, faculty for this activity, has been on the Speakers Bureau with AbbVie Inc. since April 2025.

Planners

None of the planners for this activity have any relevant financial relationships with ineligible companies to disclose.

OBJECTIVES

1. Review current guideline recommendations on duration of treatment for commonly seen infections
2. Discuss current evidence supporting shorter antibiotic courses
3. Identify clinical criteria for safely stopping antibiotics earlier



INITIAL ANTIBIOTIC COURSES

- Short courses prevailed in the 1940s
 - 2 days for pneumococcal pneumonia
 - 4-5 days reported in uncontrolled case series

Davar K, Clark D, Centor RM, et al. *Open Forum Infect Dis*. 2022;10(1):ofac706
Dominguez F, Gaffin N, Davar K, et al. *Clin Microbiol Infect*. 2023;29(11):1402-1406.

5

TWO SCHOOLS OF THOUGHT

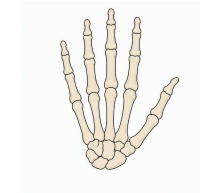
Constantine Units

- Multiples of 7



Hominid Hand

- 5 to 10 day durations



Davar K, Clark D, Centor RM, et al. *Open Forum Infect Dis*. 2022;10(1):ofac706

6



"This latter line of evidence has led 1 or more of us to speculate that the world might be a better place, with diminished antimicrobial resistance, if we had instead evolved as 3-toed sloths"

Davar K, Clark D, Centor RM, et al. *Open Forum Infect Dis*. 2022;10(1):ofac706

7

SKIN AND SOFT TISSUE INFECTIONS

UNCOMPLICATED CELLULITIS



Primary Outcome:
Resolution of infection symptoms by day 14
without symptom recurrence by day 28

- Randomized, double-blind, placebo-controlled trial
- Inclusion criteria:
 - ≥ 18 years old
 - Cellulitis of the face, trunk or extremity
- Initial antibiotics determined by the provider, levofloxacin step-down

Hepburn MJ, Dooley DP, Skidmore PJ, et al. *Arch Intern Med.* 2004;164(15):1669-1674

9

BASELINE CHARACTERISTICS

Variable	5-Day (n=44)	10-Day (n=43)
Age, mean	56	49
Male- no. (%)	24 (54)	19 (44)
No. of days of symptoms before presentation, mean	2.9	3.4
History of diabetes mellitus- no. (%)	7 (16)	5 (12)
Fever on presentation- no. (%)	4 (9)	5 (12)

Hepburn MJ, Dooley DP, Skidmore PJ, et al. *Arch Intern Med.* 2004;164(15):1669-1674

10

RESULTS

- No difference in resolution of infections (98% in both groups)
 - Only 1 clinical failure in each group
- No difference in the rates of decline in pain and swelling
- Results support IDSA skin and soft tissue infections guideline recommendation of 5 days for uncomplicated cellulitis

IDSA= Infectious Diseases Society of America
Hepburn MJ, Dooley DP, Skidmore PJ, et al. *Arch Intern Med.* 2004;164(15):1669-1674.
Stevens DL, Bisno AL, Chambers HF, et al. *Clin Infect Dis.* 2014;59(2):147-159.

11

AN UNINTENDED BENEFIT?

ESTABLISH-1 (2013)

- Randomized, double-blind, double-dummy, multinational phase 3 noninferiority trial
- Adults with ABSSTI (cellulitis, erysipelas, cutaneous abscess, wound)
- Randomization stratified by presence/absence of fever
- Randomized to 6 days tedizolid vs 10 days linezolid
- Outcomes:
 - 79.5% vs. 79.4% early clinical response
 - 69.3% vs. 71.9% in sustained clinical response at end of treatment

ESTABLISH-2 (2014)

- Randomized, double-blind, double-dummy, multinational phase 3 noninferiority trial
- Patients ≥ 12 years old with ABSSTI (cellulitis, erysipelas, cutaneous abscess, wound)
- Randomized to 6 days tedizolid vs 10 days linezolid
- Outcomes:
 - 85% vs. 83% early clinical response
 - 87% vs. 88% in sustained clinical response at end of treatment

ABSSTI= Acute bacterial skin and soft tissue infection
Proskocimer P, De Anda C, Fang E, et al. *JAMA.* 2013;309(6):559-569.
Moran GJ, Fang E, Corey GR, et al. *Lancet Infect Dis.* 2014;14(8):696-705.

12

ARE DIABETIC FOOT INFECTIONS SIMILAR?

10 vs. 20 days (post debridement) for diabetic foot SSTIs

≥18 years old, with soft tissue diabetic foot infections (per IDSA)
66 enrolled episodes

10 days non-inferior to 20 days for clinical remission (77% vs 71%)

SSTI= Skin and soft tissue infections
IDSA= Infectious Diseases Society of America
Pham TT, Gariani K, Richard JC, et al. *Ann Surg.* 2022;276(2):233-238

13

INTRA-ABDOMINAL INFECTIONS

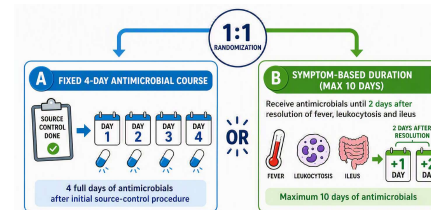
STOP-IT TRIAL

- Study to Optimize Peritoneal Infection Therapy
- 2010 IDSA Guidelines recommended durations of 4-7 days, unless unable to achieve source control
- Common practice often resulted in 10-14 days of therapy

IDSA= Infectious Diseases Society of America
Solomkin JS, Mazuski JE, Bradley JS, et al. *Clin Infect Dis.* 2010;50(1):133-164.
Sawyer RG, Claridge JA, Nathens AB, et al. *N Engl J Med.* 2015;372(21):1996-2005-1

15

STOP-IT TRIAL DESIGN



Primary Outcome:
Composite of surgical-site infection, recurrent IAI, death within 30 days of source-control procedure

- Open-label, multicenter, randomized trial
- Inclusion criteria:
 - ≥ 16 years old
 - Complicated IAI with fever or leukocytosis OR gastrointestinal dysfunction due to peritonitis
 - Underwent intervention to achieve source control

IAI= Intra-abdominal Infection
Sawyer RG, Claridge JA, Nathens AB, et al. *N Engl J Med.* 2015;372(21):1996-2005

16

BASELINE CHARACTERISTICS

Variable	4-Day (n=258)	10-Day (n=260)
Age- mean (SD)	52.2 (1.0)	52.2 (1.0)
APACHE II Score- mean (SD)	10.3 (0.4)	9.9 (0.4)
Max White cell count per mm ³ - mean (SD)	17,100 (0.7)	15,000 (0.4)
Organ of Origin- no. (%)		
Colon or rectum	97 (37.6)	80 (30.8)
Appendix	39 (15.1)	34 (13.1)
Small bowel	42 (16.3)	31 (11.9)
Source-control procedure- no. (%)		
Percutaneous drainage	86 (33.3)	89 (33.1)
Resection and anastomosis or closure	64 (24.8)	69 (26.5)
Surgical drainage only	54 (20.9)	55 (21.2)

Sawyer RG, Claridge JA, Nathens AB, et al. *N Engl J Med.* 2015;372(21):1996-2005.

17

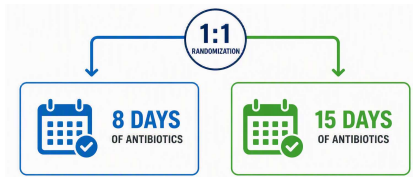
STOP-IT RESULTS

Variable	4-Day (n=257)	10-Day (n=260)	p Value
Primary Outcome- no. (%)	56 (21.8)	58 (22.3)	0.92
Surgical-site infection	17 (6.6)	23 (8.8)	0.43
Recurrent intraabdominal infection	40 (15.6)	36 (13.8)	0.67
Death	3 (1.2)	2 (0.8)	0.99
Secondary Outcomes			
Surgical site infection or recurrent IAI with resistant pathogen- no. (%)	6 (2.3)	9 (3.5)	0.62
Antimicrobial therapy for index infection- days (IQR)	4 (4-5)	8 (5-10)	<0.001
Antimicrobial Free Days at 30 days- days (IQR)	25 (21-26)	21 (18-25)	<0.001

IAI= Intra-abdominal Infection
Sawyer RG, Claridge JA, Nathens AB, et al. *N Engl J Med.* 2015;372(21):1996-2005.

18

DURAPOPTrial



Primary Outcome:
Antibiotic free days from day 8-28

Secondary Outcomes:
45-day Mortality and
Superiority analysis of death from any cause at day 28

- Open-label, multicenter, randomized trial
- Inclusion criteria:
 - Admission to ICU within 24h of surgery for post-operative IAI
 - Adequate source control,
 - Positive operative cultures
 - Empiric antibiotics started within 24 hours of surgery

IAI= Intra-abdominal infection
ICU= intensive care unit
Montravers P, Tubach F, Lescot T, et al. *Intensive Care Med.* 2018;44(3):300-310.

19

BASELINE CHARACTERISTICS

Variable	8-day arm (n=120)	15-day arm (n=116)
Age- median (IQR)	66 (57-76)	66.2 (59-77)
No underlying disease- no. (%)	72 (61)	60 (52)
Charlson score- median (IQR)	4 (2-7)	5 (3-7)
Source of Contamination- no. (%)		
Colon or rectum	57 (48)	49 (42)
Small bowel	39 (32)	37 (32)
Perforation	53 (45)	61 (53)
Source-control procedure- no. (%)		
Intraoperative drainage	87 (74)	95 (82)
Resection/excision	74 (63)	66 (57)
Ostomy	70 (59)	71 (61)

Montravers P, Tubach F, Lescot T, et al. *Intensive Care Med.* 2018;44(3):300-310.

20

DURAPOPT TRIAL OUTCOMES

- **Primary Outcome- Antibiotic Free Days**
 - 8-day arm had higher antibiotic free days (15 [6-20] vs. 12 [6-13]), $p = <0.0001$
- **Secondary Outcomes**
 - Equivalence in 45-day mortality (rate difference 0.038 (95%CI -0.013-0.061)
 - No difference in ICU or hospital length of stay, emergence of resistance or reoperation rate
 - 8-day arm had increased rates of subsequent drainages between days 8-45

Montravers P, Tubach F, Lescot T, et al. *Intensive Care Med.* 2018;44(3):300-310.

21

IAI GUIDELINES



- IDSA: 2010 recommendations of 4-7 days after source control
- Surgical Infection Society 2024:
 - 4 days for most patients with adequate source control
 - 8 days in critically ill patients with adequate source control

IDSA= Infectious Diseases Society of America
Solomkin JS, Mazuski JE, Bradley JS, et al. *Clin Infect Dis.* 2010;50(2):133-164.
Huston JM, Barie PS, Dellinger EP, et al. *Surg Infect (Larchmt).* 2024;25(6):439-435.

22

CASE #1

- A 62-year-old man with type 2 diabetes presents to the ED with 3 days of worsening abdominal pain, fever, nausea, and vomiting.
- On presentation, his temperature is 38.9°C, heart rate is 118 beats/min, blood pressure is 98/60 mmHg, and WBC count is 18,500 cells/mm³.
- CT imaging of the abdomen and pelvis reveals a perforated sigmoid diverticulitis with a 6-cm intra-abdominal abscess and free air.
- Started on empiric piperacillin-tazobactam and undergoes emergent exploratory laparotomy.
- In the OR, surgeons identify a perforated sigmoid colon with localized contamination. A sigmoidectomy is performed, the abscess is drained, and the abdominal cavity is thoroughly irrigated.
- Postoperatively, the patient improves rapidly.

23

ACTIVE LEARNING QUESTION #1

How long should this patient remain on antibiotic therapy following surgery?

- A. Continue antibiotics until the WBC normalized completely
- B. Continue antibiotics 7-10 days post-op
- C. Continue antibiotics for 4 days post-op
- D. Continue antibiotics until hospital discharge

24

ACTIVE LEARNING QUESTION #1

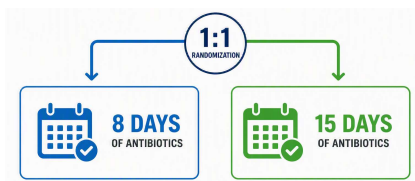
How long should this patient remain on antibiotic therapy following surgery?

- A. Continue antibiotics until the WBC normalized completely
- B. Continue antibiotics 7-10 days post-op
- C. Continue antibiotics for 4 days post-op
- D. Continue antibiotics until hospital discharge

25

PNEUMONIA

VAP: 8 VS 15 DAYS



Primary Outcomes:
Death from any cause
Microbiologically documented pulmonary infection recurrence
Antibiotic free days- 28 days after VAP onset (superiority)

- Prospective, randomized, double blind (until day 8), noninferiority trial in 51 French ICUs
- Inclusion criteria:
 - > 18 years old
 - Mechanically ventilated for at ≥ 48 hours
 - Clinical suspicion of VAP
 - Positive pulmonary cultures
 - Antibiotics started with 24 hours against organism identified

VAP= Ventilator Associated Pneumonia
ICU= Intensive Care Unit
Chastre J, Wolff M, Fagon J, et al. JAMA. 2003;290(19):2588-2598.

27

BASELINE CHARACTERISTICS

Variable	8-day arm (n197)	15-day arm (n=204)
Age- mean (SD)	60 (17)	61 (17)
Men- no. (%)	151 (76.6)	138 (67.6)
MV duration before VAP onset, days (SD)	13.4 (11.2)	13.8 (14.9)
Bacteremia- no. (%)	14 (7.1)	14 (6.9)
Shock- no. (%)	66 (33.5)	73 (35.8)
Acute respiratory distress syndrome- no. (%)	51 (25.9)	42 (20.6)
Organisms- Bacilli	169 (85.8)	189 (92.6)
<i>Pseudomonas aeruginosa</i>	58 (29.4)	62 (30.4)
Organisms- Cocci	141 (71.6)	126 (61.8)
MSSA	43 (21.8)	37 (18.1)
<i>Streptococcus</i>	44 (22.3)	40 (19.6)

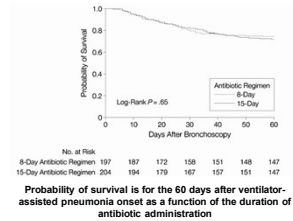
VAP= Ventilator Associated
Pneumonia
MV= mechanical Ventilation
Chastre J, Wolff M, Fagon J, et al. JAMA. 2003;290(19):2588-2598.

28

RESULTS

- No
Difference**

**50%
Higher**
- Death from all causes
 - Pulmonary infection recurrence
 - Antibiotic- free days for 8-day arm vs. 15-day arm



Chastre J, Wolff M, Fagon J, et al. JAMA. 2003;290(13):1588-1598.



PEDIATRIC CAP

- SAFER Trial (2021)**
- Parallel-group, randomized, noninferiority trial
 - Children 6 months- 10 years with outpatient CAP
 - Randomized to 5 vs 10 days high-dose amoxicillin
 - Outcomes:
 - 85.7 vs 84.1% clinical cure at 14-21 days
 - Caregiver work absenteeism lower in intervention arm (2 vs 3 days)

- SCOUT-CAP Trial (2022)**
- Randomized, double blind, placebo-controlled trial
 - Children 6-71 months with nonsevere CAP
 - Day 6: Randomized to:
 - Continue 5 days of placebo
 - Add 5 more days of the same antibiotic
 - Primary outcome: DOOR ranking of clinical response, symptom resolution, adverse events
 - 5- day strategy had 69% probability of a more desirable outcome

CAP= Community Acquired Pneumonia; DOOR=desirability of outcome ranking
Pernica JM, Harman S, Kam AJ, et al. JAMA Pediatr. 2021;175(5):475-482.
Williams DJ, Creech CB, Walter EB, et al. JAMA Pediatr. 2022;176(3):253-261.

DOOR RANKING

Assessments at visits on days 6-10, and days 19-25			
Rank	Adequate clinical response	Resolution of pneumonia symptoms	Maximal antibiotic-associated adverse effects
1	Yes	Resolved	None
2	Yes	Resolved	Mild
3	Yes	Resolved	Moderate
4	Yes	Resolved	Severe
5	Yes	Persistent symptoms	Any
6	No, ED/Clinical visit only	Any	Any
7	No, hospitalization	Any	Any
8	Death from any cause	Any	Any

Williams DJ, Creech CB, Walter EB, et al. JAMA Pediatr. 2022;176(3):253-261.

PEDIATRIC CAP

SAFER Trial (2021)

- Parallel-group, randomized, noninferiority trial
- Children 6 months- 10 years with outpatient CAP
- Randomized to 5 vs 10 days high-dose amoxicillin
- Outcomes:
 - 85.7 vs 84.1% clinical cure at 14-21 days
 - Caregiver work absenteeism lower in intervention arm (2 vs 3 days)

SCOUT-CAP Trial (2022)

- Randomized, double blind, placebo-controlled trial
- Children 6-71 months with nonsevere CAP
- Day 6: Randomized to:
 - Continue 5 days of placebo
 - Add 5 more days of the same antibiotic
- Primary outcome: DOOR ranking of clinical response, symptom resolution, adverse events
- 5- day strategy had 69% probability of a more desirable outcome

CAP= Community Acquired Pneumonia, DOOR=desirability of outcome ranking
Perrica JM, Harman S, Kam AJ, et al. *JAMA Pediatr.* 2021;175(5):475-482.
Williams DJ, Creech CB, Walter EB, et al. *JAMA Pediatr.* 2022;176(3):253-261.

33

2019 IDSA ADULT CAP GUIDELINES

- Duration dependent on clinical stability
 - Resolution of vital sign abnormalities
 - Ability to eat
 - Normal mentation
- "No less than a total of 5 days"

IDSA= Infectious Diseases Society of America
CAP= Community acquired pneumonia
Metlay JP, Waterer GW, Long AC, et al. *Am J Respir Crit Care Med.* 2019;200(7):e45-e67.

34

NON-ICU CAP: 3 VS 8 DAYS



Primary Outcome:
Cure 15 days after first antibiotic

- Randomized, double blind non-inferiority trial in 16 French centers
- Inclusion criteria:
 - ≥ 18 years old
 - Moderate-severe CAP
 - Admitted to a non-critical care unit
 - Met clinical stability after 3 days

ICU= Intensive Care Unit
CAP= community acquired pneumonia
Dinh A, Rogers J, Duran C, et al. *Lancet.* 2021;397(10280):1195-1203.

35

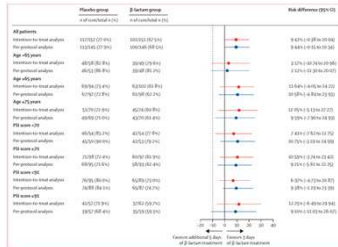
BASELINE CHARACTERISTICS

Variable	3-day arm (n=152)	8-day arm (n=151)
Age- median (IQR)	72.5 (54.0-85.3)	74.0 (58.0-83.0)
Men- no. (%)	86 (57)	94 (62)
Oxygen therapy- no. (%)	60 (39)	59 (39)
PSI Score, median (IQR)	80.5 (57.0-103)	83.0 (58.0-104)
Comorbidities- no. (%)	34 (22)	39 (26)

Dinh A, Rogers J, Duran C, et al. *Lancet.* 2021;397(10280):1195-1203.

36

RESULTS



3 days noninferior

Day 15: 77% in 3-day arm and 68% in 8-day arm determined to be cured

Primary outcome of cure at day 15

Dinh A, Ropers J, Duran C, et al. Lancet. 2021;397(10280):1195-1203.

37

IDSA CAP CLINICAL PATHWAY

- Recommend assessing stability
- Recommend "no more than 3-5 days total in the ED and inpatient if clinically stable by day 3"

IDSA= Infectious Diseases Society of America
CAP= community acquired pneumonia
Infectious Diseases Society of America. (2023). Community-acquired pneumonia (CAP) clinical pathway. Infectious Diseases Society of America. <https://www.idsociety.org/practice-guideline/community-acquired-pneumonia-cap-in-adults/>

38

DEFINING CLINICAL STABILITY

Clinical stability = meets at least 5 criteria

- $T_{max} \leq 38^{\circ}C$
- $HR \leq 100$
- $RR \leq 24$
- Arterial O_2 saturation $\geq 90\%$ or $pO_2 > 60$ mmHg
- Baseline mental status
- $SBP \geq 90$ mmHg

HR= Heart rate
RR= Respiratory rate
Infectious Diseases Society of America. (2023). Community-acquired pneumonia (CAP) clinical pathway. Infectious Diseases Society of America. <https://www.idsociety.org/practice-guideline/community-acquired-pneumonia-cap-in-adults/>

39

2026 ATS CAP GUIDELINES

Recommended Durations

Patient Population (adults only)	Duration
Outpatient CAP who reach clinical stability	Less than 5 days (minimum 3 days)
Inpatient non-severe CAP, who reach clinical stability	Less than 5 days (minimum 3 days)
Inpatient, severe CAP, who reach clinical stability	5 or more days

ATS= American Thoracic Society
Jones BE, Ramirez JA, Oren E, et al. Am J Respir Crit Care Med. 2025;211(1):24-44.

40

[illegible][illegible]

43

44

ACTIVE LEARNING QUESTION #2

What is the appropriate total duration of antibiotic therapy for this patient's CAP

- A. Discontinue antibiotics as she has completed 2 days of therapy
- B. 5 days total**
- C. 7 days total due to her multiple comorbidities
- D. 10 days due to her hospitalization

45

URINARY TRACT INFECTIONS

(COMPLICATED) URINARY TRACT INFECTIONS

IT STARTED WITH FLUOROQUINOLONES



UTI=urinary tract infection
Peterson J, Kaul S, Khashab M, Fisher AC, Kahn JB. *Urology*. 2008;71(1):17-22.
Sandberg T, Skoog G, Hermanson AB, et al. *Lancet*. 2012;380(9640):484-490.
Dinh A, David S, Etienne M, et al. *Eur J Clin Microbiol Infect Dis*. 2017;36(8):1443-1448.

48

ARE MEN REALLY COMPLICATED?



Primary Outcome:
Resolution of UTI symptoms by day 14
Secondary Outcome:
Recurrence of UTI symptoms within 28 days

- Randomized, double-blind, placebo-controlled, noninferiority trial
- Inclusion criteria:
 - ≥ 18 years old males
 - Treated outpatient
 - Diagnosed with nonfebrile UTI
- Given ciprofloxacin or trimethoprim/sulfamethoxazole

UTI= Urinary tract infection
Drekonja DM, Trautner B, Amundson C, et al. *JAMA*. 2021;326(4):324-331.

BASELINE CHARACTERISTICS

Variable	7-Day (n=136)	14-Day (n=136)
Age- median (IQR)	70 (62-73)	70 (62-75)
UTI related Comorbidities- no. (%)		
Any prior UTI	84 (62)	78 (57)
Prostatic hypertrophy	56 (41)	47 (35)
Urinary incontinence	44 (32)	52 (38)
Organism isolated- no.(%)	(n= 70)	(n= 75)
<i>E. coli</i>	30 (43)	29 (39)
<i>Klebsiella species</i>	11 (16)	12 (16)

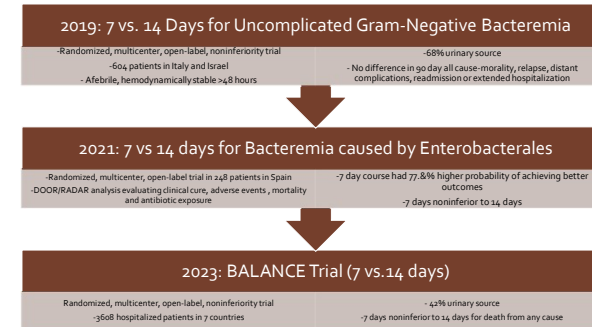
UTI= Urinary tract infection
Drekonja DM, Trautner B, Amundson C, et al. *JAMA*. 2021;326(4):324-331.

RESULTS

- No difference in resolution of UTI symptoms 14 days post antibiotics (93.1% vs 90.2%)
- No difference in recurrence of UTI symptoms within 28 days post antibiotics (9.9% vs 12.9%)
- 7 days noninferior to 14 days

UTI= Urinary tract infection
Drekonja DM, Trautner B, Amundson C, et al. *JAMA*. 2021;326(4):324-331.

BUT MY PATIENT IS BACTEREMIC....



DOOR= Desirability of outcome ranking
RADAR= Response adjusted for duration of antibiotic risk
Yahav D, Franceschini E, Koppel F, et al. *Clin Infect Dis*. 2023;69(7):1093-1098.
Molina J, Monters-Mateos E, Pravia-Segovia J, et al. *Clin Microbiol Infect*. 2022;28(4):550-557.
Daneman N, Rishu A, et al. *N Engl J Med*. 2023;392(11):1065-1078.

2025 COMPLICATED UTI GUIDELINES

Recommendations

- 5-7 days of a fluoroquinolone
- 7 days of a non-fluoroquinolone
- 7 days for associated gram-negative bacteremia
- Exception:
 - Acute bacterial prostatitis: 10-14 days

UTI= Urinary tract infection
Trautner BW, Cortés-Penfield NW, Gupta K, et al. *Clin Infect Dis.* 2025 Dec 19;ciaf463.

53

CASE #3

- A 58 year old female presents to the ED with a 2 days of fever, chills, dysuria, urinary frequency and right flank pain.
- PMH significant for type 2 diabetes, obesity and hypertension
- On admission her temperature is 39.1°C, heart rate is 112 beats/min, blood pressure is 104/62 mmHg, respiratory rate 20 breaths/min and a WBC count 16,800 cells/mm³
- Urinalysis: positive leukocyte esterase, positive nitrites, 50 WBCs/high-power field
- CT scan shows right-sided pyelonephritis without abscess, or obstruction
- Patient started on IV ceftriaxone. Urine and blood cultures grow pan-susceptible *E. coli*
- By hospital day 3, she is afebrile, hemodynamically stable and tolerating oral medications

54

ACTIVE LEARNING QUESTION #3

What is the appropriate total duration of antibiotic therapy this patient's *E. coli* bacteremia secondary to a UTI

- A. 3-5 days total
- B. 7 days total
- C. 14 days
- D. Order repeat blood cultures. Continue antibiotics until repeat blood cultures negative for 72 hours.

55

ACTIVE LEARNING QUESTION #3

What is the appropriate total duration of antibiotic therapy this patient's *E. coli* bacteremia secondary to a UTI

- A. 3-5 days total
- B. 7 days total
- C. 14 days
- D. Order repeat blood cultures. Continue antibiotics until repeat blood cultures negative for 72 hours.

56

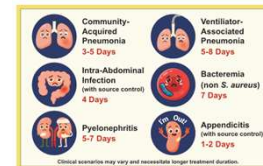
"It takes 10-20 years for clinicals to begin to meaningfully adopt new evidence-based care standards"
– Fernando Dominguez et al.

Dominguez F, Gaffin N, Davar K, et al. Clin Microbiol Infect. 2023;29(13):1402-1406.

57

DO YOUR PART TO REDUCE ANTIBIOTIC RESISTANCE

Antibiotic resistance is a major threat to public health, and it is only getting worse. Overuse, including longer than effective duration, is part of the problem. Updated duration recommendations (shorter is better) are available. Visit www.kdhe.ks.gov/antibiotic-resistance for the full guide or visit www.kdhe.ks.gov/antibiotic-resistance for more information.



Every day of antibiotics counts!
 Each additional day is associated with:

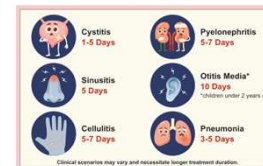
Adverse Events **4%** ↑ risk per day
 Antibiotic Resistance **3%** ↑ risk per day

Healthcare-Associated Infections & Antimicrobial Resistance Section



DO YOUR PART TO REDUCE ANTIBIOTIC RESISTANCE

Antibiotic resistance is a major threat to public health, and it is only getting worse. Overuse, including longer than effective duration, is part of the problem. Updated duration recommendations (shorter is better) are available. Visit www.kdhe.ks.gov/antibiotic-resistance for the full guide or visit www.kdhe.ks.gov/antibiotic-resistance for more information.



Every day of antibiotics counts!
 Each additional day is associated with:

Adverse Events **4%** ↑ risk per day
 Antibiotic Resistance **3%** ↑ risk per day

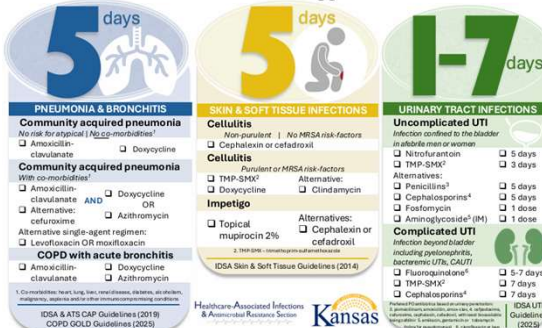
Healthcare-Associated Infections & Antimicrobial Resistance Section



<https://www.kdhe.ks.gov/DocumentCenter/View/52788/Shorter-Is-Better-Antibiotic-Use-Poster-11x17-Inpatient-PDF>
<https://www.kdhe.ks.gov/DocumentCenter/View/52789/Shorter-Is-Better-Antibiotic-Use-Poster-11x17-Outpatient-PDF>

58

Rx Antibiotic Duration Decision Support



<https://www.kdhe.ks.gov/DocumentCenter/View/52790/Duration-Rx-Pad-PDF>

59

THANK YOU!

Questions?

You can reach me at

Stephanie Harding
 Stephanie.Harding@wesleymc.com
 316-962-7474

Collect Your CE

The Lecture Panda code for this session is:

{code here}

All course credits from this conference must be submitted by Oct. 28th, 2026

60