IDSAP 2019 Book 2 (Multidrug-Resistant Gram-Negative Infections)
Total Available Hours: 13.5
BCIDP test deadline: 11:59 p.m. (Central) on May 15, 2020.
ACPE test deadline: 11:59 p.m. (Central) on November 14, 2022.

Multidrug-Resistant Gram-Negative Infections I (Module 1) – Credit Hours: 4.5

Chapter: *Pseudomonas aeruginosa*
Learning Objectives

1. Evaluate the microbiology, epidemiology, pathogenesis, mechanisms of resistance, and clinical presentation in patients with a possible *Pseudomonas aeruginosa* infection.
2. Evaluate patient populations at greatest risk of having an infection caused by *P. aeruginosa*, including multidrug-resistant strains.
3. Design a therapeutic regimen for a patient with a suspected or documented *P. aeruginosa* infection.
4. Justify the role of antimicrobial stewardship and the pharmacist in treating patients with *P. aeruginosa* infections.

Chapter: Other Non-fermenters: *Acinetobacter* and *Stenotrophomonas*
Learning Objectives

1. Distinguish between infection and colonization of *Acinetobacter baumannii* and *Stenotrophomonas maltophilia*, and assess potential sources for nosocomial outbreaks.
2. Assess the various methods of intrinsic and acquired resistance mechanisms and their implications on the antibiotic susceptibility of *A. baumannii* and *S. maltophilia*.
3. Evaluate the agents available for treating *A. baumannii* and *S. maltophilia* infections, and delineate the place in therapy for each agent.

Multidrug-Resistant Gram-Negative Infections II (Module 2) – Credit Hours: 4.5

Chapter: Optimizing Empiric Gram-Negative Therapy
Learning Objectives

1. Justify the importance of the antibiogram in determining appropriate empiric antimicrobial therapy.
2. Justify an empiric antimicrobial therapy recommendation on the basis of a clinical prediction rule.
3. Design empiric antimicrobial pharmacotherapy on the basis of rapid diagnostic test results.

Chapter: PK/PD for Optimizing Therapy
Learning Objectives

1. Justify various dosing strategies for patient cases using pharmacokinetic (PK) and pharmacodynamic (PD) principles.
2. Evaluate PK-PD information derived from different data sources for application to patient care.

3. Apply PK and PD metrics from a population model to therapeutic decision-making.
4. Devise optimal dosing regimens to combat different multidrug-resistant gram-negative organisms.

Multidrug-Resistant Gram-Negative Infections III (Module 3) – Credit Hours: 4.5

Chapter: Antibiotic Resistance in Enterobacteriaceae
Learning Objectives

1. Evaluate mechanisms of antibiotic resistance in Enterobacteriaceae and their impact on patient outcomes.
2. Evaluate the impact of Enterobacteriaceae resistance mechanisms on antibiotic efficacy.
3. Assess for clinically relevant phenotypes, and devise treatment strategies on the basis of susceptibility patterns.
4. Evaluate the role in therapy of new β-lactam/β-lactamase inhibitor antibiotics for drug-resistant Enterobacteriaceae.

Chapter: Recorded Webcast: Piperacillin/Tazobactam vs. Carbapenems for ESBL-Producing Enterobacteriaceae
Learning Objectives

1. Apply knowledge of the in vitro activity and pharmacokinetics/pharmacodynamics of piperacillin/tazobactam against extended-spectrum β-lactamase (ESBL)-producing Enterobacteriaceae in designing pharmacotherapy.
2. Evaluate the clinical outcomes data on the use of piperacillin/tazobactam for treatment of bloodstream infections caused by ESBL-producing Enterobacteriaceae.
3. Justify the designation of carbapenems as first-line for treatment of bloodstream infections caused by ESBL-producing Enterobacteriaceae.
4. Evaluate the use of novel β-lactam β-lactamase inhibitors for infections with ESBL-producing Enterobacteriaceae.