### IDSAP 2020 Book 2 (*Resistant Gram-Positive Infections*) Release date: November 16, 2020 BCACP test deadline: 11:59 p.m. (Central) on May 17, 2021. ACPE test deadline: 11:59 p.m. (Central) on November 16, 2023.



Continuing Pharmacy Education Credit: The American College of Clinical Pharmacy

and the American Society of Health-System Pharmacists are accredited by the Accreditation Council for Pharmacy Education (ACPE) as providers of continuing pharmacy education (CPE).

**ACSAP Target Audience:** The target audience for IDSAP 2020 Book 2 (*Resistant Gram-Positive Infections*) is board-certified and advanced level ambulatory care clinical pharmacists who manage the care of patients with resistant gram-positive infections.

# Module I (4.0 CPE) *Resistant Gram-Positive Infections* I UAN: 0217-9999-20-222-H01-P

#### Chapter: *Staphylococcus* Learning Objectives (A)

1. Evaluate patients for signs of epidemiology of methicillin-resistant *Staphylococcus aureus* (MRSA) infections.

2. Justify the use of diagnostic tests to detect antibiotic resistance in *S. aureus*.

3. Develop patient-specific diagnostic and antibiotic treatment plans using infection-specific *S. aureus* epidemiology.

4. Develop antibiotic treatment strategies for MRSA infections using patient- and infectionspecific information and available scientific evidence.

### Chapter: Enterococcus

### Learning Objectives (A)

1. Evaluate risk factors for mortality in patients with enterococcal infection.

2. Assess for mechanisms of resistance to antibiotics commonly used in the treatment of enterococcal infections.

3. Design antimicrobial treatment regimens (agent, dose, frequency) for the patient with enterococcal infection.

4. Design antimicrobial treatment regimens (agent, dose, frequency) for the treatment of vancomycin-resistant *Enterococcus* bloodstream infection.

Module 2 (4.0 CPE) *Resistant Gram-Positive Infections* II UAN: 0217-9999-20-223-H01-P

Chapter: Streptococcus pneumoniae

#### Learning Objectives:

1. Evaluate patients with *Streptococcus pneumoniae* infection, accounting for national and local rates of drug resistance.

2. Apply an understanding of the mechanisms of *S. pneumoniae* drug resistance in designing pharmacotherapy regimens.

3. Evaluate patient risk factors for drug-resistant S. pneumoniae.

4. Determine antibiotic options for drug-resistant *S. pneumoniae*, and design optimal antibiotic regimens according to location of infection.

5. Evaluate strategies to prevent drug-resistant S. pneumoniae infections.

### Chapter: Clostridioides difficile

### Learning Objectives

1. Analyze changes in the epidemiology of *Clostridioides difficile* infection (CDI) for potential causes or associations.

2. Evaluate patient populations for CDI on the basis of associated morbidity and recurrence rates.

3. Design appropriate treatment regimens for CDI in various settings and severities.

4. Evaluate evidence for CDI primary and secondary prevention interventions

# Module 3 (4.5 CPE) *Resistant Gram-Positive Infections* III UAN: 0217-9999-20-224-H01-P

### Chapter: Rapid Diagnostic Testing and Antimicrobial Stewardship Learning Objectives

1. Evaluate the role of rapid diagnostic testing in achieving antimicrobial stewardship goals.

2. Evaluate available technologies and methods for identifying gram-positive organisms and resistance mechanisms.

3. Justify the use of antimicrobial stewardship teams in optimizing utilization of rapid diagnostic tests.

4. Justify involvement of the antimicrobial stewardship team in management of commonly seen gram-positive infections

5. Assess patients for barriers to implementation of rapid diagnostic testing

6. Develop solutions that overcome barriers to implementation of rapid diagnostic testing

### Chapter: PK/PD of Gram-positive Agents

### Learning Objectives (A)

1. Apply the basic principles of pharmacokinetic and pharmacodynamic (PK/PD) properties of antibiotics and incorporate them into patient care.

2. Apply PK/PD principles as they pertain to gram-positive antibiotics.

3. Develop therapeutic dosing strategies for gram-positive agents using PK/PD metrics and consideration of patient- and pathogen-specific factors.

4. Justify the use of PK/PD principles of gram-positive agents in antimicrobial stewardship.

## Module 4 (3.0 CPE) *Resistant Gram-Positive Infections* IV UAN: 0217-9999-20-225-H01-P

## Interactive Case: Combination Antibiotics for *Staphylococcus aureus* Learning Objectives:

1. Differentiate between the combination options in the use of salvage combination therapy for *Staphylococcus aureus* infection.

2. Evaluate antibiotic effectiveness in combination therapy for *Staphylococcus aureus* infection.

3. Assess for limitations of utilizing antibiotic combination for *Staphylococcus aureus* infection.

4. Assess the application of antibiotic combination for *Staphylococcus aureus* in certain infections.

#### Interactive Case: *C. difficile* Infection Diagnostics Learning Objectives:

1. Design a practice-specific *C. difficile* diagnostic testing algorithm that minimizes the risk of false-positive and false-negative results.

2. Evaluate the appropriateness of repeat *C. difficile* testing in patients recently tested or treated for *C. difficile*-associated diarrhea.

3. Justify withholding diagnostic testing for *C. difficile* diarrhea in patients not meeting appropriate clinical criteria to test.

4. Develop a strategy to reduce health care facility–onset *C. difficile* infection rates.