#### CCSAP 2019 Book 1 (Infection Critical Care)

**Total Available Hours: 16.5** 

**BCCCP test deadline:** 11:59 p.m. (Central) on September 16, 2019.

ACPE test deadline: 11:59 p.m. (Central) on March 14, 2022.

Infection Critical Care I (Module 1) - Credit Hours: 4.5

#### **Chapter: Sepsis Management**

#### **Learning Objectives**

- 1. Assess the updates in guideline definitions and recommendations for managing sepsis and/or septic shock.
- 2. Evaluate recent literature regarding the management of sepsis and septic shock.
- 3. Design an evidence-based treatment regimen for a patient with sepsis and/or septic shock.
- 4. Justify pharmacist involvement in preventing, recognizing, and managing sepsis and/or septic shock.

## **Chapter: CNS Infections**

#### **Learning Objectives**

- 1. Distinguish between markers of viral and bacterial CNS infections.
- 2. Design intrathecal and intraventricular treatment regimens for CNS infections.
- 3. Evaluate guidelines for the treatment of nosocomial ventriculitis and meningitis.
- 4. Develop regimens for surgical prophylaxis to prevent CNS infections.

#### Infection Critical Care II (Module 2) – Credit Hours: 7.0

#### **Chapter: Microbiome Dysbiosis**

#### **Learning Objectives**

- 1. Classify the therapeutic means for modulation of the microbiome in critical illness and its application.
- 2. Assess the benefit-risk for use of probiotic therapy in critically ill patients.
- 3. Evaluate use of selective digestive decontamination in reducing ventilator-associated pneumonia in critically ill patients.
- 4. Assess the efficacy of fecal microbiota transplantation in the treatment of *Clostridioides difficile* infection.

## Chapter: HIV-1 Infection in the Critically III Patient

#### **Learning Objectives**

- 1. Assess patients with HIV/AIDS for the most common reasons for ICU admission in the current era of antiretroviral therapy (ART).
- 2. Distinguish risk-benefit in continuing, holding, or initiating ART in the setting of critical illness.
- 3. Design preferred and alternative therapies to manage opportunistic infections in the ICU.

4. Recognize and develop therapeutic strategies to manage ART-related toxicities and potential drug interactions in critically ill patients with HIV/AIDS.

#### Chapter: Rapid Diagnostic Testing and Biomarkers Learning Objectives

- 1. Distinguish between the various available rapid diagnostic tests (RDTs) for bacterial, viral, and fungal infections.
- 2. Evaluate the evidence surrounding the use of RDTs in critically ill patients.
- 3. Apply RDTs in the management of infections in critically ill patients.
- 4. Analyze the recent clinical evidence surrounding the use of biomarkers for managing infections in critically ill patients.
- 5. Justify the role of antimicrobial stewardship in the application of RDT and biomarker results.

#### Infection Critical Care III (Module 3) – Credit Hours: 5.0

# **Chapter: Interactive Case: Antibiotic Dosing Issues Learning Objectives**

- 1. Distinguish risk factors for augmented renal clearance (ARC) in the critically ill patient, and describe the relative incidence of ARC among different ICU populations.
- 2. Evaluate the usefulness of different ARC scoring systems and glomerular filtration rateestimating equations in patients with ARC.
- 3. Distinguish patients who may benefit from continuous infusion  $\beta$ -lactam therapy.
- 4. Given a patient receiving continuous renal replacement therapy, develop an antimicrobial dosing regimen that provides adequate and safe antibiotic exposure.

## **Chapter: Interactive Case: Antimicrobial Stewardship in Critical Care Learning Objectives**

- 1. Apply principles of antimicrobial stewardship to develop interventions that optimize antimicrobial use in critically ill patients.
- 2. Evaluate various laboratory techniques and rapid diagnostic technologies as they relate to patient care and outcomes.
- 3. Evaluate emerging antimicrobial stewardship strategies in the ICU setting.
- 4. Assess the role of new antibiotics and their relative advantages and disadvantages in the ICU setting.