**Materials for this course will release 05/15/2020**

Infectious Diseases Self-Assessment Program (IDSAP) Book 1: PK/PD in Special Populations and Antimicrobial Prophylaxis (Cert # L209207)

**Teaser:** This Self-Assessment Program series provides Infectious Disease pharmacists with pertinent therapeutic updates to enhance their practice skills and improve patient outcomes.

**Tag:** Certifications; Infectious Disease

**ACPE Numbers:** Various – see listing below  
**Pre-Sale Date:** 04/15/2020  
**Content Release Date:** 05/15/2020  
**Expiration Dates:** 11/17/2020  
**Activity Type:** Application-based  
**CE Credits:** TBD hours (BPS and ACPE)  
**Activity Fee:** $75 (ASHP member); $110 (non-member)

**Accreditation for Pharmacists**  
The American College of Clinical Pharmacy and American Society of Health-System Pharmacists are accredited by the Accreditation Council for Pharmacy Education as providers of continuing pharmacy education.

**Target Audience**  
The target audience for IDSAP 2020 Book 1 (PK/PD in Special Populations and Antimicrobial Prophylaxis) is board certified and advanced-level infectious disease pharmacists involved in evidence-based management strategies for the prevention and management of drug-resistant gram-negative infections.

**Activity Overview**  
This course is intended for board certified pharmacists in need of recertification credit and is designed based on the content outline developed by the Board of Pharmacy Specialties (BPS). The course consists of 3 learning modules (see table below) and provides up to TBD hours of continuing pharmacy education and/or recertification credit.

Learners will be required to review the content and complete the associated online assessments. The learner must be able to correctly answer the questions based upon their interpretation of the content, as well as “baseline specialty specific knowledge and/or easily retrievable information.” For purposes of this course, “baseline specialty specific knowledge and/or easily retrievable information” is defined as product labeling and well-established standards of practice in the specialty practice.

These activities are part of the ACCP and ASHP and professional development program for BCIDP recertification approved by the BPS.
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Recertification Credit*
Board certified pharmacists are eligible to receive up to TBD hours of recertification credit for completing this course. To earn recertification credit, learners must review the activity content and successfully complete the online assessments by the deadline. Only completed assessments will be eligible for credit; no partial or incomplete assessments will be processed. You are allowed only one attempt to successfully complete this assessment.

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<th>Learning Activity</th>
<th>ACPE Number</th>
<th>Credit Hours</th>
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LEARNING OBJECTIVES

IDSAP 2020 Book 1: PK/PD in Special Populations I
ACPE Number: TBD

PK/PD in Critical Illness
- Evaluate the impact of critical illness-related pharmacokinetic and pharmacodynamic differences on antimicrobial exposures and dosing requirements in critically ill patients.
- Design and justify various alternative dosing strategies for commonly used antimicrobials that can be applied in critically ill patients based on current pharmacokinetic and pharmacodynamic data.
- Design and justify various antimicrobial dosing strategies for sub-groups of patients in the ICU (e.g., augmented renal clearance, renal replacement therapy and extracorporeal membrane oxygenation patients).
- Evaluate and assess the latest pharmacokinetic and pharmacodynamic data presented to be applied in clinical decision making.

TDM of Anti-infectives
- Assess for various pharmacodynamic end points associated with optimal antimicrobial activity.
- Justify implementation and/or creation of therapeutic drug monitoring services.
- Distinguish between calculations to appropriately determine patient-specific pharmacokinetic parameters.
- Compare and contrast the benefits of various dosing strategies for antimicrobials such as vancomycin and aminoglycosides.
- Assess serum concentrations of medications that require therapeutic drug monitoring and make appropriate recommendations for dose adjustment.
Surgical Prophylaxis

- Evaluate published evidence regarding optimal antimicrobial prophylactic regimens and explain the role of various antimicrobial prophylactic treatment plans.
- For a given patient, develop an antimicrobial plan for the prevention of surgical site infection.
- Assess patients for risk factors associated with an increased risk of surgical site infections.
- Evaluate the role of topical antibiotics for the prevention of surgical infections.

Adult Vaccines

- Develop an understanding of recent epidemiologic changes, etiology, risk factors, and clinical presentation of common vaccine-preventable diseases.
- Distinguish between the various available influenza, pneumococcal, herpes zoster, tetanus diphtheria pertussis, measles mumps rubella, and hepatitis vaccines.
- Evaluate the impact of influenza and pneumococcal vaccines on antibiotic resistance.
- Design a patient-specific immunization regimen based on age, risk factors, and comorbid conditions.
- Justify the role of the pharmacist in addressing pseudo-science.

Drug Assay Methodologies

- Distinguish between the types of bioanalytical methods and assess advantages and disadvantages of each method.
- Evaluate drug concentrations based on the approved FDA procedures and protocols.
- Develop validated assays according to the FDA standards.
- Apply common procedures and workflow for drug concentration quantification.
- Distinguish between procedures needed for clinical and research-only samples.

Interactive Case: Clinical Decision Support Systems in Drug Dosing

- Assess for technical and regulatory challenges around precision dosing clinical decision-support systems (CDSS), ability to classify tools.
- Apply the concepts of Bayesian dosing tools, exemplified using vancomycin.
- Assess appropriateness and limitations of literature PK models, and how to apply in individual patient cases.
- Evaluate the use of dosing tools in individual patient cases.
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**Recorded Webcast: Regulatory Environment for Drugs**
- Evaluate the societal, clinical, and economic burden of antimicrobial resistance and the importance of antibiotics to health care.
- Assess the various stages of drug development while providing timelines in each stage and how the FDA is involved in each stage of R&D.
- Evaluate the regulatory process for drugs from the FDA perspective.
- Distinguish between the various legislative and funding approaches in aiding with antimicrobial development and approval.
- Evaluate novel regulatory processes to aid in the development and approval of antibiotics.

**Faculty Panel Chair**
TBD

**Series Editors**
TBD

**Reviewers**
TBD

**Authors**
TBD

**Disclosures**
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All planners, presenters, and reviewers of this session report no financial relationships relevant to this activity.
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Methods and CE Requirements
Activities can be completed in any order. Each activity consists of audio, video, and/or PDFs and evaluations. Learners must review all content and complete the evaluations to receive continuing pharmacy education credit for each activity.

Follow the prompts to claim, view, or print the statement of credit within 60 days after completing the activity.

System Technical Requirements
Learning activities are delivered via your Web browser and Acrobat PDF. For all activities, you should have a basic comfort level using a computer and navigating web sites.

View the minimum technical and system requirements for learning activities.

Development
These activities were developed by ACCP and ASHP.