

December 7 - 8, 2024 New Orleans, Louisiana

Sponsored by The American Society of Health-System Pharmacists

Planned by the ASHP Sections of Clinical Specialists and Scientists.

©2024 American Society of Health-System Pharmacists, Inc. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, microfilming, and recording, or by any information storage and retrieval system, without written permission from the American Society of Health-System Pharmacists.

The information presented herein reflects the opinions of the faculty. Instructors prepared these materials for use by Board Certified Pharmacotherapy Specialists or advanced pharmacotherapy practitioners who are seeking to update their knowledge and skills in the practice area. They are not intended as a comprehensive source of drug information on this topic. The contents of the course material have not been reviewed by the ASHP publication process, and should not be interpreted as official policy of ASHP or an endorsement of any products(s), nor should they be considered as a substitute for the professional judgment of the pharmacist or physician.

SATURDAY, DECEMBER 7

7:30 a.m. – 8:00 a.m.

Welcome/Introductions and Tips for Success

8:05 a.m. – 9:35 a.m.

Cardiovascular Disease: Primary Prevention Case

Kristin Watson, PharmD, BCCP

ACPE Number: 0204-0000-24-947-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including hypertension, dyslipidemia, chronic kidney disease, diabetes, and obesity.
- State the Centers for Disease Control and Prevention Advisory Committee on Immunization Practices recommendations for adult immunizations.
- Determine how to advise a patient on point-of-care testing to measure response to drug therapy.
- Discuss national benchmarking standards and implications to patient care.

9:30 a.m. - 9:45 a.m.

Break

9:45 a.m. - 11:45 a.m.

Research Methods, Data Analysis, and Evidence-Based Practice

Stuart Haines, PharmD, BCACP, BCPS, BC-ADM, FAPhA, FASHP, FCCP

ACPE Number: 0204-0000-24-946-L01-P Application-based: 2 contact hours*

Objectives:

- Analyze biomedical literature with regard to study methodology, statistical analysis, and significance
- Explain the use of evidence-based treatment guidelines and protocols
- Interpret the biomedical literature and its application to clinical practice
- Identify sources of information to use to answer questions in one's practice, or from patients and healthcare professionals.

11:45 a.m. – 12:45 p.m.

Lunch (on your own) - or bring your lunch and join us for an informal round of "EBP Jeopardy" to fine tune your "Evidence-Based Practice"

^{*}See page 10 for more information.

12:45 p.m. – 2:15 p.m.

Providing Safe and Effective Pharmacotherapy:

Key Regulatory and Quality Approaches

Patricia C. Kienle, BSPharm, MPA, BCSCP, FASHP ACPE Number: 0204-0000-24-946-L01-P

Application-based: 1.5 contact hours*

Objectives:

- Explain the regulatory and accreditation requirements of a comprehensive medication use program.
- Describe methods to develop and maintain a medication use system.
- Discuss technology used to promote safe and effective medication use.
- Apply national regulations and evidence-based practices for medication safety and quality.
- Interpret results from pharmacotherapy-related quality improvement activities.

2:15 p.m. - 2:30 p.m.

Break

2:30 p.m. - 4:00 p.m.

Cardiovascular Disease: Secondary Prevention Case

Snehal Bhatt, PharmD, BCPS-AQ Cardiology, FASHP

ACPE Number: 0204-0000-24-947-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions.
- Develop a plan to address continuity of care issues.
- Formulate a medication therapy plan for smoking cessation.
- Determine how to manage drug drug and drug-induced disease interactions in a patient with ischemic heart disease.
- Discuss quality of life in this population.
- Discuss national benchmarking standards and implications to patient care.

4:00 p.m. – 4:15 p.m.

Break

4:15 p.m. - 5:45 p.m.

Complex Heart Failure Case

Christopher Betz, PharmD, BCPS, FKSHP, FASHP

ACPE Number: 0204-0000-24-947-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select optimal treatment and monitoring for a complex patient-case with multiple conditions, including heart failure, electrolyte disturbances in acute decompensated heart failure, diabetes, and a thyroid disorder.
- Discuss the medications that should be avoided in heart failure.
- Identify safety issues in this population.

^{*}See page 10 for more information.

SUNDAY, DECEMBER 8

7:55 a.m. – 8:00 a.m.

Announcements

8:00 a.m. - 9:30 a.m.

Oncology and Supportive Care Case

Victoria R. Nachar, PharmD, BCOP ACPE Number: 0204-0000-24-949-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select the appropriate treatment and monitoring of a complex patient-case with multiple conditions, including breast cancer, febrile neutropenia, and cancer-associated thromboembolism.
- Compare and contrast current cancer screening recommendations.
- Develop a plan to manage pain and nausea/vomiting in a patient with cancer.
- Discuss safety issues in this population.
- Discuss adherence issues with oral chemotherapy regimens.

9:30 a.m. - 9:45 a.m.

Break

9:45 a.m. - 10:45 a.m.

Gastrointestinal Disorders

Brooklyn Olumba, PharmD, BCPS

ACPE Number: 0204-0000-24-949-L01-P Application-based: 1.5 contact hours*

Objectives:

For patients with nausea, vomiting, inflammatory bowel disease,

gastroesophageal reflux disease, or peptic ulcer disease:

- Recommend appropriate treatment and monitoring, based on drug-specific variables, patient-specific information and clinical practice guidelines.
- Evaluate drug-related problems and response to therapy.
- Recommend modifications of patient-specific treatment plans based on follow up assessment.

10:45 a.m. - 11:30 a.m.

Board of Pharmacy Specialties Overview

11:30 a.m. – 12:30 p.m.

Lunch (on your own)

12:30 p.m. - 2:00 p.m.

Complex Pediatric Asthma Case

Jill Morgan, PharmD, BCPS, BCPPS ACPE Number: 0204-0000-24-948-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select optimal treatment and monitoring for a complex patient-case with acute asthma exacerbation, acute otitis media, and seasonal allergies.
- Apply methods for counseling a patient and/or caregiver in asthma selfmanagement with comprehensive documentation of the patient counseling.
- Develop a plan for childhood vaccinations in a child who has been delayed in receiving them.
- Implement principles of shared-decision making and culturally effective care when using complementary/alternative medicine in a pediatric patient.

^{*}See page 10 for more information.

2:00 p.m. - 2:15 p.m.

Break

2:15 p.m. - 3:45 p.m.

Complex Nursing Home Patient Case

Kalin M. Clifford, PharmD, BCPS, BCGP, FASCP ACPE Number: 0204-0000-24-949-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select the appropriate treatment for a complex patient-case with multiple conditions, including stroke, depression/anxiety, alzheimers, dementia, benign prostatic hypertrophy, urinary incontinence, and pain.
- Discuss complementary/alternative medicine and safety issues in older adults.
- Discuss quality improvement initiatives and regulations in the nursing home setting.
- Discuss hospice and palliative care issues in the older adult

3:45 p.m. - 4:00 p.m.

Break

4:00 p.m. - 5:30 p.m.

Complex Pneumonia Case

Katherine Lusardi, PharmD, BCIDP ACPE Number: 0204-0000-24-948-L01-P Application-based: 1.5 contact hours*

Objectives:

- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including pneumonia, acute renal insufficiency, sepsis, chronic obstructive pulmonary disease, and dehydration.
- Interpret clinical data, including lab, physical examination and vital signs.
- Determine and prioritize pneumonia-related treatment goals.
- Determine approaches to manage drug allergies and select next best drug therapy when primary drugs are precluded.
- Discuss approaches to limiting antimicrobial over use by stewarding antibiotic usage appropriately.
- Discuss safety issues in patients receiving treatment for pneumonia.

5:30 p.m. - 5:40 p.m.

Closing Remarks

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) are referenced with permission from the National Comprehensive Cancer Network® (NCCN®). To view the most recent and complete version of the guideline, go online to NCCN.org. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, NCCN GUIDELINES®, and all other NCCN Content are trademarks owned by the National Comprehensive Cancer Network, Inc.

^{*}See page 10 for more information.

WEB-ONLY MODULES - RELEASE DATE FEBRUARY 5, 2025

Cardiac Arrhythmias and Advanced Cardiac Life Support

Heather Draper, PharmD, BCPS, BCEMP Application-based: 1 contact hour Objectives:

- Interpret signs, symptoms and diagnostic tests for cardiac arrhythmias.
- Identify drug-related problems, including drug interactions and adverse effects, associated with pharmacotherapy of cardiac arrhythmias.
- Identify strategies to prevent drug-induced arrhythmias.
- Recommend therapy and monitor for cardiac arrhythmias based on patient-specific information, current guidelines and Advanced Cardiac Life Support recommendations.

Complex HIV/AIDS Case

Mark Cinquegrani, PharmD, BCACP, AAHIVP Application-based: 1 contact hour Objectives:

- Recognize appropriate treatment regimens and monitoring of a complex patient-case with multiple conditions, including HIV infection, dyslipidemia, and hepatitis B.
- Identify and manage common drug interactions and adverse drug reactions experienced by HIV-treated patients.
- Determine appropriate medication choices for the treatment and prevention of common opportunistic infections.
- Discuss recommendations for pre-exposure prophylaxis (PrEP).

Diabetes

Lourdes Cross, PharmD, BCACP, CDCES Application-based: 1 contact hour Objectives:

- Interpret diagnostic and/or laboratory tests in patients with diabetes.
- Formulate the most appropriate treatment, monitoring, and followup plans based on patient-specific information and current guidelines.
- Evaluate drug-related problems.

Heart Failure

Kazuhiko Kido, PharmD, BCPS, BCCP Application-based: 1 contact hour Objectives:

- Interpret diagnostic and/or laboratory tests, vital signs and clinical presentation in patients with heart failure.
- Formulate the most appropriate treatment and monitoring plans, based on patient-specific information and current guidelines for patients with heart failure.
- Recommend appropriate modifications of patient-specific treatment plans based on follow up assessment in patients with heart failure.

^{*}See page 10 for more information.

Fluid, Electrolytes, and Nutrition

Diana Solomon, PharmD, BCCCP Application-based: 1 contact hour Objectives:

- Interpret laboratory and diagnostic tests for fluid, electrolyte, and nutrition status.
- Recommend the most appropriate therapy and monitoring in patients with fluid, electrolyte, and nutritional disorders based on patient-specific information and current guidelines.
- Apply strategies to manage drug-related electrolyte interactions and nutrient interactions.

Infectious Diseases: Part I

Tina Beck, PharmD, MSCR, BCPS Application-based: 1 contact hour Objectives:

For the following infectious diseases: *C.difficile* infection, skin and soft tissue infections, upper respiratory tract infections, community acquired pneumonia

- Interpret laboratory and diagnostic tests
- Formulate the most appropriate treatment, monitoring, and followup plans based on patient-specific information and current guidelines.
- Evaluate drug-related problems.

Infectious Diseases: Part II

Krutika Mediwala-Hornback, PharmD, BCPS, BCIDP

Application-based: 1 contact hour

Objectives:

For the following infectious diseases: sexually transmitted diseases, urinary tract infections, endocarditis, meningitis

- Interpret laboratory and diagnostic tests
- Formulate the most appropriate treatment, monitoring, and followup plans based on patient-specific information and current guidelines.
- Manage drug-related problems.

Neurologic Disorders

Jonathan Wietholter, PharmD, BCPS, FCCP

Application-based: 1 contact hour

Objectives:

For patients with seizure disorders, Parkinson's disease, headache and sleep disorders:

- Evaluate the risks and benefits of drug therapy considering other medication and patient specific factors.
- Formulate the most appropriate treatment, monitoring and followup plans based on patient-specific information and current guidelines.
- Evaluate drug-related problems.

^{*}See page 10 for more information.

Patient Education and Health Literacy Nicholas Owens, PharmD, BCACP, BCPS, FCPP

Application-based: 1 contact hour

Objectives:

- Assess considerations for communicating pharmacotherapy plans to different patient populations including pediatrics, geriatrics, and patients with low health-literacy.
- Evaluate methods for educating patients and caregivers on safe and appropriate use of medications and devices.

Psychiatric and Substance Abuse Disorders

Mei Liu, PharmD, BCPP

Application-based: 1 contact hour

Objectives:

For patients with bipolar disorder, schizophrenia, anxiety disorders, post-traumatic stress disorder, and/or substance abuse disorder:

- Interpret basic diagnostic factors, clinical presentation, and target symptoms of selected psychiatric disorders.
- Formulate the most appropriate treatment, monitoring, and followup plans based on patient-specific information and current guidelines.
- Evaluate drug-related problems and response to therapy.

Kidney Disorders

Laura Waite, PharmD, BCPS, CLS Application-based: 1 contact hour Objectives:

- For patients with acute kidney injury and chronic kidney disease, determine the most appropriate treatment and monitoring based on drug characteristics, patient-specific factors, and current clinical practice guidelines.
- Manage drug dosing and drug-related complications in patients receiving renal replacement therapy.
- Identify appropriate modifications to the treatment plans based on follow-up assessment to optimize outcomes.

Musculoskeletal and **Rheumatic Disorders**

Thuyvan Phan, PharmD, BCPS Application-based: 1 contact hour Objectives:

For patients with rheumatoid arthritis, osteoarthritis and gout:

- Formulate the most appropriate treatment and monitoring, based on drug-specific variables, patient-specific information and clinical practice guidelines.
- Evaluate drug-related problems and response to therapy.
- Recommend appropriate modifications of patient-specific treatment plans based on follow up assessment.

^{*}See page 10 for more information.

Selected Topics in Critical Care

Paul Szumita, PharmD, BCCCP, BCPS, FASHP, FCCM Application-based: 1 contact hour Objectives:

- Interpret diagnostic and/or laboratory tests, vital signs, and clinical presentation in order to differentiate types of shock (hypovolemic, distributive, cardiogenic).
- Compare and contrast the pharmacologic agents utilized in shock
- Recommend the most appropriate therapy and monitoring based on patient-specific information and current guidelines for the treatment of shock, prevention of stress ulcers, and prevention of venous thromboembolism.

Selected Topics in Acute Care Part I

Nathan A. Pinner, PharmD, BCPS, FASHP Application-based: 1 contact hour Objectives:

- Interpret diagnostic and/or laboratory tests, vital signs, and clinical presentation in acutely ill patients.
- Recommend the most appropriate therapy and monitoring based on patient-specific information and current guidelines for the treatment of venous thromboembolism (VTE)
- Recommend the most appropriate therapy and monitoring based on patient-specific information and current guidelines for the treatment of chronic obstructive pulmonary disease

Selected Topics in Acute Care Part II

Lauren A. Igneri, PharmD, BCPS, BCCCP, FCCM Application-based: 1 contact hour Objectives:

- Interpret diagnostic and/or laboratory tests, vital signs, and clinical presentation in acutely ill patients.
- Recommend the most appropriate therapy and monitoring based on patient-specific information and current guidelines for the treatment of acute ischemic stroke, anticoagulation reversal, and toxicologic emergencies.

Women's Health

Morgan King, BS, PharmD, BCPPS Application-based: 1 contact hour Objectives:

- Describe pertinent sex-based differences in pharmacodynamics and pharmacokinetics that affect exposure and response to medications.
- Recommend appropriate treatment, monitoring and follow-up plans based on patient-specific information and current guidelines for osteoporosis and menopausal symptoms.
- Select appropriate contraceptive options, including emergency contraception, based on patient-specific information.
- Evaluate the safety and efficacy of common therapies used during pregnancy and lactation.
- Formulate treatment recommendations for common complications that occur during labor and delivery.

^{*}See page 10 for more information.

ACCREDITATION FOR PHARMACISTS



The American Society of Health-System Pharmacists is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education with Commendation.

ACPE credit may be claimed at the end of the live Review and Recertification Course after completing an activity evaluation. ACPE credit is sorted into groups, as follows:

GROUP	ACPE Number	Title	Hours	Attendance Code
1	0204-0000-24-946-L01-P	Pharmacotherapy Review and Recertification Course: Research Methods, Data Analysis and Evidence-based Practice	2	
		Pharmacotherapy Review and Recertification Course: Providing Safe and Effective Pharmacotherapy: Key Regulatory and Quality Approaches	1.5	
2	0204-0000-24-947-L01-P	Pharmacotherapy Review and Recertification Course: Cardiovascular Disease: Primary Prevention Case	1.5	
		Pharmacotherapy Review and Recertification Course: Cardiovascular Disease: Secondary Prevention	1.5	
		Pharmacotherapy Specialty Review and Recertification Course: Complex Heart Failure Case	1.5	
3	0204-0000-24-948-L01-P	Pharmacotherapy Review and Recertification Course: Complex Pediatric Asthma Case	1.5	
		Pharmacotherapy Specialty Review and Recertification Course: Complex Pneumonia Case	1.5	
4	0204-0000-24-949-L01-P	Pharmacotherapy Review and Recertification Course: Complex Nursing Home Case	1.5	
		Pharmacotherapy Specialty Review and Recertification Course: Oncology and Supportive Care Case	1.5	
		Pharmacotherapy Specialty Review and Recertification Course: Gastrointestinal Disorders	1	

^{*}See page 10 for more information.

FACULTY

Tina Beck, PharmD, MSCR, BCPS

Associate Professor University of the Incarnate Word San Antonio, Texas

Christopher Betz, PharmD, BCPS, FKSHP, FASHP**

Professor, Department of Clinical and Administrative Sciences & Cardiology Clinical Pharmacy Specialist Sullivan University College of Pharmacy Louisville, Kentucky

Snehal Bhatt, PharmD, BCPS-AQ Cardiology, FASHP**

Associate Professor of Pharmacy Practice and Clinical Pharmacist MCPHS University and Beth Israel Deaconess Medical Center Boston, Massachusetts

Mark Cinquegrani, PharmD, BCACP, AAHIVP

Clinical Assistant Professor, Department of Pharmacy Practice Temple University School of Pharmacy Philadelphia, Pennsylvania

Kalin M. Clifford, PharmD, BCPS, BCGP, FASCP

Assistant Professor of Pharmacy Practice, Geriatrics Division Texas Tech University Health Sciences Center School of Pharmacy Dallas, Texas

Lourdes Cross, PharmD, BCACP, CDCES

Associate Professor, Department of Pharmacy Practice Sullivan University College of Pharmacy and Health Sciences Louisville, Kentucky

Heather Draper, PharmD, BCPS, BCEMP

Clinical Pharmacy Specialist, Emergency Medicine Trinity Health Saint Mary's Grand Rapids, Michigan

Lauren A. Igneri, PharmD, BCPS, BCCCP, FCCM

Clinical Pharmacy Specialist - Critical Care Cooper University Health Care Camden, New Jersey

Stuart Haines, PharmD, BCACP, BCPS, BC-ADM, FAPhA, FASHP, FCCP

Professor of Pharmacy Practice Director of the Division of Pharmacy Professional Development University of Mississippi School of Pharmacy Jackson, Mississippi

^{*}See page 10 for more information.

FACULTY (CONTINUED)

Kazuhiko Kido, PharmD, BCPS, BCCP

Clinical Associate Professor West Virginia University School of Pharmacy Morgantown, West Virginia

Patricia C. Kienle, BSPharm, M.P.A., BCSCP, FASHP

Director, Accreditation and Medication Safety Cardinal Health Innovative Delivery Systems Wilkes-Barre, Pennsylvania

Morgan King, BS, PharmD, BCPPS

Clinical Pharmacy Specialist Cleveland Clinic Fairview Hospital Cleveland, Ohio

Mei Liu, PharmD, BCPP

Clinical Assistant Professor Ernest Mario School of Pharmacy Rutgers, The State University of New Jersey Piscataway, New Jersey

Katherine Lusardi, PharmD, BCIDP

Clinical Pharmacy Specialist, Infectious Diseases Baptist Health System Little Rock, Arkansas

Krutika Mediwala-Hornback, PharmD, BCPS, BCIDP

Clinical Pharmacy Specialist - Infectious Diseases & Antimicrobial Stewardship Medical University of South Carolina (MUSC) Health Charleston, South Carolina

Jill Morgan, PharmD, BCPS, BCPPS

Associate Professor and Chair for the Department of Pharmacy Practice and Science University of Maryland School of Pharmacy Baltimore, Maryland

Victoria R. Nachar, PharmD, BCOP

Clinical Pharmacist Specialist - Ambulatory Hematology Michigan Medicine Rogel Cancer Center Adjunct Clinical Assistant Professor University of Michigan College of Pharmacy Ann Arbor, Michigan

Brooklyn Olumba, PharmD, BCPS**

Clinical Pharmacy Specialist, Ambulatory Care Memorial Hermann Southwest Hospital Houston, Texas

^{*}See page 10 for more information.

FACULTY (CONTINUED)

Nicholas Owens, PharmD, BCACP, BCPS, FCPP

Clinical Associate Professor Philadelphia College of Pharmacy, School of Health Professions Saint Joseph's University - University City Campus Philadelphia, Pennsylvania

Thuyvan Phan, PharmD, BCPS

Clinical Pharmacists Practitioner UNC Rheumatology Specialty Clinic Chapel Hill, North Carolina

Nathan A. Pinner, PharmD, BCPS, FASHP

Associate Clinical Professor Auburn University Harrison College of Pharmacy Internal Medicine Pharmacy Specialist Princeton Baptist Medical Center Mountain Brook, Alabama

Paul Szumita, PharmD, BCCCP, BCPS, FASHP, FCCM

Director, Clinical Pharmacy Brigham & Women's Hospital Boston, Massachusetts

Laura Waite, PharmD, BCPS, CLS

Assistant Dean of Student Affairs and Admissions
Director of Student Recruitment and Engagement
Clinical Associate Professor of Pharmacy Practice
Philadelphia College of Pharmacy, School of Health Professions
Saint Joseph's University - University City Campus
Philadelphia, Pennsylvania

Kristin Watson, PharmD, BCCP

Associate Professor University of Maryland School of Pharmacy Baltimore, Maryland

Jonathan Wietholter, PharmD, BCPS, FCCP

Clinical Professor West Virginia University School of Pharmacy Morgantown, West Virginia

^{**}Content matter experts

^{*}See page 10 for more information.