Pharmacotherapy Specialty Recertification Literature Study: Module 1A-C (Cert # L239185)

**Teaser:** The Literature Study Module provides immediate access to peer-selected, contemporary articles that are relevant to specialty practice. After learners review the content, they must successfully complete an online assessment to earn recertification credit.

**Tag:** Certifications; Pharmacotherapy

**ACPE Numbers:** Various – see listing below  
**Pre-Sale Date:** 03/15/2023  
**Content Release Date:** 04/12/2023  
**Expiration Dates:** 10/17/2023  
**Activity Type:** Application-based  
**CE Credits:** 15 contact hours (BPS and ACPE)  
**Activity Fee:** $55 (ASHP member); $110 (non-member)

**Accreditation**  
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.

**Target Audience**  
These Literature Studies are designed to help board-certified pharmacists who are seeking recertification contact hours to maintain their Board of Pharmacy Specialties (BPS).

**Activity Overview**  
The Literature Study Module 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). This module consists of 3 online home study activities (see table below). Each activity is designed to assess the learners’ ability to analyze and apply peer-selected contemporary articles to practice and includes a short video for enhanced learning and understanding.

Module 1A: Critical Care: This module focuses on current issues in critical care. Topics include intracerebral hemorrhage, adrenal insufficiency, hyponatremia, and use of midodrine in vasodilatory shock.

Module 1B: Women's Health: This module focuses on current issues in Women's Health. Topics include hypertension in pregnancy, contraception, medications in pregnancy, and osteoporosis.

Module 1C: Current Topics: This module includes updates on various therapeutic areas. Topics include use of aspirin, treatment of heart failure, management of benign prostatic hyperplasia, and vaccines.

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 Literature Study, “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 ASHP professional development program for BCPS recertification approved by the BPS.

**Recertification Credit***

Board certified pharmacists are eligible to receive up to 15 hours of recertification credit for completing this module. 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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<tr>
<th>Learning Activity</th>
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<td>Module 1A: Critical Care</td>
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<tr>
<td>Recertification Assessment</td>
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**Articles and Learning Objectives**

**Module 1A: Critical Care**  
**ACPE #: 0204-0000-23-954-H0X**  

This module focuses on current issues in critical care. Topics include intracerebral hemorrhage, adrenal insufficiency, hyponatremia, and use of midodrine in vasodilatory shock.


Learning Objectives:
- Describe the 2022 guideline for the management of patients with spontaneous intracerebral hemorrhage (ICH) from the American Heart Association (AHA) and American Stroke Association (ASA).
- Develop recommendations for the management of patients with spontaneous intracerebral hemorrhage (ICH).


Learning Objectives:
- Describe the study by Kam and colleagues of intracranial hemorrhage from the use of intravenous (IV) alteplase in patients with acute ischemic stroke.
- Develop recommendations for the use of intravenous (IV) alteplase in patients with acute ischemic stroke.


Learning Objectives:
- Describe strategies for the treatment of adrenal insufficiency (AI) and prevention of adrenal crisis.
- Develop recommendations for the treatment of patients with adrenal insufficiency (AI) and prevention of adrenal crisis.

**Learning Objectives:**
- Describe the epidemiology, clinical presentation, classification, pathophysiology, and treatment of hyponatremia.
- Develop recommendations for the treatment of patients with hyponatremia.


**Learning Objectives:**
- Describe the adjunctive use of oral midodrine with intravenous (IV) vasopressors in critically ill adults in the recovery phase of vasodilatory shock.
- Develop recommendations for the adjunctive use of oral midodrine with intravenous (IV) vasopressors in the recovery phase of vasodilatory shock in critically ill adults.

**Module 1B: Women’s Health**

**ACPE #: 0204-0000-23-955-H0X**

This module focuses on current issues in Women’s Health. Topics include hypertension in pregnancy, contraception, medications in pregnancy, and osteoporosis.


**Learning Objectives:**
- Describe the scientific statement from the American Heart Association (AHA) on diagnosis, blood pressure goals, and pharmacotherapy for pregnant women with hypertension.
- Develop recommendations for the diagnosis and treatment of hypertensive disorders of pregnancy (HDP).


**Learning Objectives:**
- Describe the Chronic Hypertension and Pregnancy (CHAP) trial by Tita and colleagues of antihypertensive drug therapy for pregnant women with mild chronic hypertension.
- Develop recommendations for the blood pressure to use as a threshold for initiating and target during antihypertensive drug therapy in pregnant women with mild chronic hypertension.


**Learning Objectives:**
- Describe the effectiveness, adverse effects, and other considerations in choosing among available reversible contraceptives.
- Develop recommendations for reversible contraception, taking into consideration medication or device effectiveness, risks, and patient values and preferences.

Learning Objectives:
- Describe considerations in choosing a contraceptive method for and counseling pregnancy-capable women with cardiovascular (CV) disease about contraception.
- Recommend contraceptive methods and provide counseling about contraception for pregnancy-capable women with cardiovascular (CV) disease taking into consideration the potential benefits and risks and patient preferences.


Learning Objectives:
- Describe the use of medication abortion, including prescriber and patient considerations, contraindications, cautions, requirements for pretreatment testing and follow up, safety risks, and legal and regulatory issues
- Develop recommendations for the use of medication abortion, taking into consideration patient safety and needs and state and federal legal requirements and constraints.


Learning Objectives:
- Describe the epidemiology, clinical presentation, classification, and management of trigeminal autonomic cephalalgias (TACs) during pregnancy and breastfeeding.
- Develop recommendations for the management of trigeminal autonomic cephalalgias (TACs) in women who are pregnant or breastfeeding.


Learning Objectives:
- Describe the study by Harris and colleagues of maternal use of triptans during pregnancy and the risk of attention-deficit/hyperactivity disorder (ADHD) in their offspring.
- Develop recommendations for the use of triptans by pregnant women to treat migraine.


Learning Objectives:
- Describe the meta-analysis by Deardorff and colleagues of studies of the time to benefit (TTB) from bisphosphonate therapy for the prevention of nonvertebral and other fractures in postmenopausal women with osteoporosis.
- Develop recommendations for the use of bisphosphonate therapy in postmenopausal women with osteoporosis taking into consideration the potential benefits and harms and life expectancy.
Module 1C: Current Topics  
ACPE #: 0204-0000-23-956-H0X  
This module includes updates on various therapeutic areas. Topics include use of aspirin, treatment of heart failure, management of benign prostatic hyperplasia, and vaccines.


Learning Objectives:
- Describe the U.S. Preventive Services Task Force recommendation statement on aspirin use to prevent cardiovascular disease
- Develop recommendations for the use of aspirin for primary prevention of cardiovascular disease.

Heidenreich PA, Bozkurt B, Aguilar D, et al. 2022 AHA/ACC/HFSA Guideline for the management of heart failure: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Circulation. 2022; 145: e895-e1032. (Focus on select sections: 2 (e901-904), 3 (e906-908), 4 (e908-911), 5 (e919-921), 6 (e921-923), 7.1-7.3 (e923-941), 7.7 (e949-952); 7.8 (e952-e955); 8 (e955-e958); 9 (e960-967); 10 (e969-972); 11 (e973-978))

Learning Objectives:
- Describe the 2022 American Heart Association (AHA)/American College of Cardiology (ACC)/Heart Failure Society of America (HFSA) guideline for the management of heart failure (HF).
- Develop recommendations for the management of patients with heart failure (HF).


Learning Objectives:
- Describe the American Urological Association (AUA) guideline for the initial work up and medical management of lower urinary tract symptoms (LUTS) attributed to benign prostatic hyperplasia (BPH)
- Develop recommendations for the initial work up for or medical management of lower urinary tract symptoms (LUTS) in a patient with benign prostatic hyperplasia (BPH).

Meissner HC. Understanding vaccine safety and the roles of the FDA and the CDC. N Engl J Med. 2022; 386: 1638-45

Learning Objectives:
- Describe the roles of the Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC) in ensuring vaccine safety, including the methods for evaluating safety and efficacy, pathways by which vaccine products are authorized or licensed, and factors taken into consideration in establishing vaccine recommendations.
- Explain to other healthcare professionals and patients the methods used by federal, state, and local agencies to ensure the safety and efficacy of vaccines for preventable diseases.


Learning Objectives:
- Describe the updated recommendations of the Centers for Disease Control and Prevention Advisory Committee on Immunization Practices (ACIP) for the use of the 20-valent pneumococcal conjugate vaccine (PCV20) and 15-valent pneumococcal conjugate vaccine (PCV15).
- Develop recommendations for the use of the 20-valent pneumococcal conjugate vaccine (PCV) and 15-valent pneumococcal conjugate vaccine (PCV15) in adults.
Materials for this course will release 04/12/2023

Faculty
Kelsey Bauman, PharmD, BCPS, BCCCP
Clinical Pharmacy Specialist
SSM Health St. Claire Hospital
Fenton, Missouri

Brooklyn Cobb, PharmD, BCPS
Clinical Pharmacy Specialist, Ambulatory Care
Memorial Hermann Southwest Hospital
Houston, Texas

Julianna Fernandez, PharmD, BCPS, BCGP
Clinical Associate Professor
University of Houston College of Pharmacy
Houston, Texas

Danielle Fixen, PharmD, BCGP, BCPS
Assistant Professor, Department of Clinical Pharmacy
University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences
Aurora, Colorado

Lauren Floris, PharmD, BCPS
Clinical Pharmacist - Medical Intensive Care Unit
Atrium Health Navicent
The Medical Center
Macon, Georgia

Rena Gosser, PharmD, BCPS
Clinical Ambulatory Pharmacy Manager
University of Washington Medicine - Harborview Medical Center
Seattle, Washington

Benjamin Hohlfelder, PharmD, BCCCP, BCPS
Critical Care Pharmacy Clinical Specialist
Cleveland Clinic
Cleveland, Ohio

Morgan King, BS, PharmD, BCPPS
Clinical Pharmacy Specialist
Cleveland Clinic Fairview Hospital
Cleveland, Ohio

Noelle Leung, PharmD, BCPPS
Maternal Fetal Medicine and Obstetrics Clinical Pharmacy Specialist
University of Kentucky Chandler Medical Center
Associate Professor, Pharmacy Practice & Science
University of Kentucky College of Pharmacy
Lexington, Kentucky

Kent Owusu, PharmD, BCCCP, BCPS
Program Manager, Care Signature, Surgical Services Lead, Professional Development and Engagement
Yale New Haven Health
New Haven, Connecticut

Andrew Webb, PharmD, BCCCP
Clinical Pharmacist, Neurocritical Care
Massachusetts General Hospital
Boston, Massachusetts
Pharmacotherapy Specialty Recertification Literature Study

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Content Matter Experts
Christopher Betz, PharmD, BCPS, FASHP, FKSHP
Professor
Sullivan University College of Pharmacy & Health Sciences
Cardiology Clinical Pharmacy Specialist
Jewish Hospital Rudd Heart & Lung Center - U of L Health
Louisville, Kentucky

Snehal H. Bhatt, PharmD, AACC, BCPS-AQ Cardiology, FASHP
Professor of Pharmacy Practice Massachusetts College of Pharmacy and Health Sciences
Framingham, Massachusetts

Dana Carroll, PharmD, BCGP, BCPS, CDES
Clinical Professor
Auburn University Harrison School of Pharmacy
University of Alabama Family Medicine
Auburn, Alabama

Amie Taggart Blaszczyk, PharmD, BCGP, BCPS, FASCP
Professor and Division Head – Geriatrics
Texas Tech University Health Sciences Center
School of Pharmacy
Lubbock, Texas

Maria Shin, PharmD, BCGP, BCPS*
Clinical Pharmacy Specialist in Internal Medicine
Robley Rex Louisville Veterans Affairs Medical Center
Louisville, Kentucky

Douglas Slain, PharmD, BCPS, AQ-ID*
Professor & Infectious Diseases Clinical Specialist
West Virginia University
Morgantown, West Virginia

Reviewers
Susan R. Dombrowski, MS, RPh
Anna M. Wodlinger-Jackson, PharmD, BCPS

Field Testers
Hakeem Abayomi, BSc, PharmD, BCPS, BCPPS, BCIDP, BCCCP
Megan Adelman, PharmD, BCPS, BCGP, CDCES
Samrawit Agonafer, PharmD, BCPS
Tara Breuer, BCPS, BCSCP
Stephanie Brooks, PharmD, BCPS
Cyrus Cheeseman, PharmD, BCPS
Poonam Chhunchha, PharmD, BCPS
Julie Clarkson, PharmD, BCPS, BCCP, BCCCP
Sumeet Deogan, PharmD, MS, BCPS, BCCCP
Milouse Dornevil, PharmD, BCPS, BCNSP
David Dulak, PharmD, BCPS
Nicole Free, PharmD, BCPS
Christopher Goncalo, PharmD, BCPS
Rachel Griffioen, PharmD, BCPS
Brittany Hayes, PharmD, BCPS, BCACP
Powela Jombai, PharmD, BCPS
Nicole Joyce, PharmD, BCPS
Eric Kinney, PharmD, BCPS

Emily Kostelic, PharmD, BCPS
Prutha Lavani, PharmD, BCPS, BCCP
Jacky Lee, PharmD, BCPS, BCCCP
Pohung Lin, PharmD, BCPS, BCP
Angela Mann, PharmD, BCPS, BCCCP
Rukshana Miah, PharmD, BCPS
Christopher Miller, PharmD, BCPS
Kayla Money, PharmD, BCPS
Matthew Morrison, PharmD, BCPS
Archana Nath, PharmD, BCPS
David Park, PharmD, BCPS
George Piasare, PharmD, BCPS, MBA
Amy Reiner, PharmD, BCPS
Jenna Rose, PharmD, BCPS
Nissa Tasnim, PharmD, BCPS
Cortney Valela, PharmD, BCPS
Mollie VanNatta, PharmD, BCPS, BCIDP
Eric Vertin, PharmD, BCPS, BCIDP

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Methods and CE Requirements
Activities consist of educational materials, assessments, and activity evaluations. In order to receive continuing pharmacy education credit, learners must:
- Complete the attestation statement
- Review all content
- Complete and pass the assessments
- Complete the evaluations

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

System Technical Requirements
Courses and 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 ASHP.