

Materials for this course will release 10/19/2022

Cardiology Pharmacy Specialty Literature Study: Module 1A-B (Cert # L229140)

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; Cardiology



ACPE Numbers: Various – see listing below

Pre-Sale Date: 09/21/2022

Content Release Date: 10/19/2022

Expiration Dates: 10/17/2023

Activity Type: Application-based

CE Credits: 8 contact hours

Activity Fee: \$55 (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 a provider of continuing pharmacy education.

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 2 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.

Module 1A -- Updates in Heart Failure: This module focuses on guideline-directed medical therapy, diuretic resistance and updates in heart failure with preserved ejection fraction.

Module 1B -- Updates in Antiplatelets, Cardiomyopathy and Cardiogenic Shock: This module focuses on new treatments for cardiomyopathy, as well as updates on antiplatelet use after percutaneous coronary intervention and treatments for cardiogenic shock.

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

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“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 ACCP and ASHP professional development program for BCCP recertification approved by the BPS.

Recertification Credit*

Board certified pharmacists are eligible to receive up to 8 contact 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.

Learning Activity	ACPE Number	Contact Hours	Assessment Pass Point
Cardiology Pharmacy Literature Study Module 1A: Updates in Heart Failure	0204-9999-22-958-H01-P	4.5	TBD
Cardiology Pharmacy Literature Study Module 1B: Updates in Antiplatelets, Cardiomyopathy and Cardiogenic Shock	0204-9999-22-959-H01-P	3.5	TBD
Recertification Assessment Group 1		8.0 BPS	

Articles and Learning Objectives

Module 1A: Updates in Heart Failure

ACPE #: 0204-9999-22-958-H01-P

This module focuses on guideline-directed medical therapy, diuretic resistance and updates in heart failure with preserved ejection fraction.

Carnicelli AP, Lippmann SJ, Greene SJ et al. Sacubitril/valsartan initiation and postdischarge adherence among patients hospitalized for heart failure. *J Card Fail.* 2021; 27:826-36.

Learning Objectives:

- Describe the study by Carnicelli and colleagues of angiotensin receptor neprilysin inhibitor (ARNI) therapy in patients hospitalized for heart failure with reduced ejection fraction (HFrEF).
- Develop recommendations for the timing of sacubitril/valsartan initiation in patients hospitalized for heart failure with reduced ejection fraction (HFrEF).

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Bhatt DL, Szarek M, Steg PG et al. Sotagliflozin in patients with diabetes and recent worsening heart failure. *N Engl J Med.* 2021; 384:117-28.

Learning Objectives:

- Describe the Effect of Sotagliflozin on Cardiovascular Events in Patients with Type 2 Diabetes Post Worsening Heart Failure (SOLOIST-WHF) trial.
- Develop recommendations for the use of sotagliflozin in patients with type 2 diabetes mellitus and worsening heart failure.

Anker SD, Butler J, Filippatos G et al. Empagliflozin in heart failure with a preserved ejection fraction. *N Engl J Med.* 2021; 385:1451-61.

Learning Objectives:

- Describe the Empagliflozin Outcome Trial in Patients with Chronic Heart Failure with Preserved Ejection Fraction (EMPEROR-Preserved),
- Develop recommendations for the use of empagliflozin in patients with chronic heart failure with preserved ejection fraction (HFpEF).

Palau P, Seller J, Domínguez E et al. Effect of β -blocker withdrawal on functional capacity in heart failure and preserved ejection fraction. *J Am Coll Cardiol.* 2021; 78:2042-56.

Learning Objectives:

- Describe the PRESERVE-HR study by Palau and colleagues of β -blocker withdrawal in patients with heart failure and preserved ejection fraction (HFpEF) and chronotropic incompetence.
- Develop recommendations for the use of β -blockers in patients with heart failure and preserved ejection fraction (HFpEF) and chronotropic incompetence.

Rao VS, Ivey-Miranda JB, Cox ZL, et al. Natriuretic equation to predict loop diuretic response in patients with heart failure. *J Am Coll Cardiol.* 2021; 77:695-708.

Learning Objectives:

- Describe the study by Rao and colleagues of the use of a natriuretic response prediction equation (NRPE) to guide intravenous (IV) loop diuretic therapy in patients with acute decompensated heart failure (ADHF).
- Develop recommendations for the use of predictive tools to guide intravenous (IV) loop diuretic therapy in patients with acute decompensated heart failure (ADHF).

Felker GM, Ellison DH, Mullens W et al. Diuretic therapy for patient with heart failure—JACC state-of-the-art review. *J Am Coll Cardiol.* 2020; 75:1178-95.

Learning Objectives:

- Describe renal physiology and response to diuretics, the pharmacology and pharmacodynamics of diuretics, mechanisms and strategies for overcoming diuretic resistance, and loop diuretic use in patients with acute or chronic heart failure.
 - Develop recommendations for the use of diuretic therapy in patients with heart failure.
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Module 1B: Updates in Antiplatelets, Cardiomyopathy and Cardiogenic Shock

ACPE #: 0204-9999-22-959-H01-P

This module focuses on new treatments for cardiomyopathy, as well as updates on antiplatelet use after percutaneous coronary intervention and treatments for cardiogenic shock.

Koo BK, Kang J, Park KW et al. Aspirin versus clopidogrel for chronic maintenance monotherapy after percutaneous coronary intervention (HOST-EXAM): an investigator-initiated, prospective, randomised, open-label, multicentre trial. *Lancet*. 2021; 397:2487-96.

Learning Objectives:

- Describe the HOST-EXTended Antiplatelet Monotherapy (HOST-EXAM) trial by Koo and colleagues comparing aspirin with clopidogrel as chronic maintenance monotherapy after percutaneous coronary intervention and drug-eluting stent placement.
- Develop recommendations for the use of chronic maintenance antiplatelet monotherapy as secondary prevention of atherosclerotic cardiovascular events after successful completion of recommended dual antiplatelet therapy (DAPT) in patients with coronary artery disease (CAD), percutaneous coronary intervention (PCI), and drug-eluting stent (DES) placement.

Valgimigli M, Frigoli, Heg D et al. Dual antiplatelet therapy after PCI in patients at high bleeding risk. *N Engl J Med*. 2021; 385:1643-55.

Learning Objectives:

- Describe the MASTER DAPT trial by Valgimigli and colleagues.
- Develop recommendations for the duration of dual antiplatelet therapy (DAPT) in patients with an acute or chronic coronary syndrome who are at high risk for bleeding after successful percutaneous coronary intervention (PCI) with drug-eluting stent (DES) placement.

Escaned J, Cao D, Baber U et al. Ticagrelor monotherapy in patients at high bleeding risk undergoing percutaneous coronary intervention: TWILIGHT-HBR. *Eur Heart J*. 2021; 42:4624-34.

Learning Objectives:

- Describe the prespecified analysis by Escaned and colleagues of a subset of TWILIGHT trial participants at high bleeding risk (HBR).
- Develop recommendations for antiplatelet therapy in patients who are at high risk for bleeding after successful percutaneous coronary intervention (PCI) with drug-eluting stent (DES) placement.

Olivotto I, Oreziak A, Barriales-Villa R et al. Mavacamten for treatment of symptomatic obstructive hypertrophic cardiomyopathy (EXPLORER-HCM): a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet*. 2020; 396:759-69.

Learning Objectives:

- Describe the EXPLORER-HCM trial by Olivotto and colleagues of mavacamten for treating patients with symptomatic obstructive hypertrophic cardiomyopathy.
- Develop recommendations for the use of mavacamten in patients with symptomatic obstructive hypertrophic cardiomyopathy.

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Mathew R, Di Santo P, Jung RG et al. Milrinone as compared with dobutamine in the treatment of cardiogenic shock. *N Engl J Med.* 2021; 385:516-25.

Learning Objectives:

- Describe the Dobutamine Compared with Milrinone (DOREMI) trial.
- Develop recommendations for the use of inotropic therapy in patients with cardiogenic shock.

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No persons in control of content have any relevant financial relationships with an ineligible company.

As required by the Standards of Integrity and Independence in Accredited Continuing Education, all relevant financial relationships have been mitigated prior to the CPE activity.

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

ACCP and ASHP collaborate on cardiology activities.