

## 2023 Geriatric Pharmacy Specialty Recertification Literature Study: Module 1A-C Articles and Learning Objectives

### Module 1A: Oncology and Immunology

ACPE#: 0204-9999-23-962-H01

This module focuses on cancer management in older patients as well as contemporary issues related to vaccines.

Novak J, Goldberg A, Dharmarajan K, et al. Polypharmacy in older adults with cancer undergoing radiotherapy: a review. *J Geriatr Oncol.* 2022; 13:778-783.

Learning Objectives:

- Describe polypharmacy in older adults with cancer undergoing radiation therapy.
- Develop recommendations for medication review and optimization of medications to minimize polypharmacy in older adults with cancer undergoing radiation therapy.

Li D, Sun C, Kim H, et al. Geriatric Assessment–Driven Intervention (GAIN) on Chemotherapy-Related Toxic Effects in Older Adults With Cancer: A Randomized Clinical Trial. *JAMA Oncol.* 2021; 7(11):e214158

Learning Objectives:

- Describe the study by Li and colleagues of geriatric assessment-driven intervention (GAIN) for older adults with cancer receiving chemotherapy.
- Develop recommendations for implementing geriatric assessment-driven intervention (GAIN) for older adults with cancer receiving chemotherapy.

Nebhan CA, Cortellini A, et al. Clinical Outcomes and Toxic Effects of Single-Agent Immune Checkpoint Inhibitors Among Patients Aged 80 Years or Older With Cancer A Multicenter International Cohort Study. *JAMA Oncol.* 2021; 7(12):1856-1861.

Learning Objectives:

- Describe the study by Nebhan and colleagues of immune checkpoint inhibitor (ICI) therapy in patients 80 years of age or older with cancer.
- Develop recommendations for the use of immune checkpoint inhibitors in patients 80 years of age or older with cancer.

Suarez-Almazor ME, Pundole X, Cabanillas G, et al. Association of bone mineral density testing with risk of major osteoporotic fractures among older men receiving androgen deprivation therapy to treat localized or regional prostate cancer. *JAMA Network Open.* 2022; 5:e225432.

Learning Objectives:

- Describe the study by Suarez-Almazor and colleagues of dual-energy X-ray absorptiometry (DXA) screening for low bone mineral density (BMD) in older men with prostate cancer who are initiating androgen deprivation therapy (ADT).

- Develop recommendations for the use of dual-energy X-ray absorptiometry (DXA) screening for low bone mineral density (BMD) in older men with prostate cancer who are initiating androgen deprivation therapy (ADT).

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.

Kobayashi M, Farrar JL, Gierke R, et al. Use of 15-Valent Pneumococcal Conjugate Vaccine and 20-Valent Pneumococcal Conjugate Vaccine Among U.S. Adults: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022. *MMWR Morb Mortal Wkly Rep.* 2022; 71:109–117.

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.

Ferdinands JM, Alyanek E, Reed C, Fry AM. Waning of influenza vaccine protection: exploring the trade-offs of changes in vaccination timing among older adults. *Clin Inf Dis.* 2020; 70(8):1550-9.

Learning Objectives:

- Describe the model developed by Ferdinands and colleagues to evaluate the impact of the timing of influenza vaccination on influenza-associated hospitalizations of older adults.
- Develop recommendations for the timing of influenza vaccination of older adults.

## Module 1B: Current Topics

ACPE#: 0204-9999-23-963-H01

This module focuses on cancer management in older patients as well as contemporary issues related to vaccines.

Silber MH, Buchfuhrer MJ, Early CJ, et al. The management of restless legs syndrome: an updated algorithm. *Mayo Clinic Proc.* 2021; 96(7):1921-1937.

Learning Objectives:

- Describe the management of restless legs syndrome (RLS), including the updated algorithm from the RLS Foundation.
- Develop recommendations for the management of restless legs syndrome (RLS).

Deardorff WJ, Cenzer I, Nguyen B, Lee SJ. Time to benefit of bisphosphonate therapy for the prevention of fractures among postmenopausal women with osteoporosis: A meta-analysis of randomized clinical trials. *JAMA Int Med.* 2022; 182:33-41.

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.

Zhang W, Zhang S, Deng Y, et al. Trial of intensive blood-pressure control in older patients with hypertension. *NEJM.* 2021; 385: 1268-79.

Learning Objectives:

- Describe the Strategy of Blood Pressure Intervention in Elderly Hypertensive Patients (STEP) study by Zhang and colleagues.
- Develop recommendations for the target systolic blood pressure (SBP) in older adult patients with hypertension.

Chen T, Shao F, Chen K, et al. Time to clinical benefit of intensive blood pressure lowering in patients 60 years and older with hypertension: A secondary analysis of randomized clinical trials. *JAMA Int Med.* 2022: 1657.

Learning Objectives:

- Describe the analysis by Chen and colleagues of the time to clinical benefit from the use of intensive blood pressure control instead of standard blood pressure control in older adult patients with hypertension.

- Develop recommendations for the target systolic blood pressure (SBP) in older adult patients with hypertension taking into consideration the potential benefits and harms and life expectancy.

McDonald EG, Wu PE, Rashidi B, et al. The MedSafer Study—Electronic Decision Support for Deprescribing in Hospitalized Older Adults: A Cluster Randomized Clinical Trial. *JAMA Intern Med.* 2022; 182(3):265-273.

Learning Objectives:

- Describe the 2022 MedSafer study by McDonald and colleagues of electronic decision support for medication deprescribing in hospitalized older adults with polypharmacy.
- Develop recommendations for medication deprescribing interventions for hospitalized older adults with polypharmacy.

Bayliss EA, Shetterly SM, Drace ML, et al. Deprescribing Education vs Usual Care for Patients With Cognitive Impairment and Primary Care Clinicians: The OPTIMIZE Pragmatic Cluster Randomized Trial. *JAMA Intern Med.* 2022; 182(5):534–542. doi:10.1001/jamainternmed.2022.0502.

Learning Objectives:

- Describe the Optimal Medication Management in Alzheimer Disease and Dementia (OPTIMIZE) study by Bayliss and colleagues of an intervention to increase patient and primary care clinician awareness of the potential to deprescribe unnecessary or risky medications in older adult outpatients with polypharmacy, dementia, or mild cognitive impairment (MCI), and additional chronic medical conditions.
- Develop recommendations for medication deprescribing strategies in the primary care setting for older adult outpatients with polypharmacy, dementia, or mild cognitive impairment (MCI), and additional chronic medical conditions.

## Module 1C: Guideline Updates

ACPE#: 0204-9999-23-964-H01

This module focuses on recent updates to guidelines for the management of benign prostatic hyperplasia, aspirin use for primary prevention of cardiovascular disease, coronary artery revascularization, and falls in adults with cardiovascular disease.

Lerner LB, McVary KT, Barry MJ, et al. Management of lower urinary tract symptoms attributed to benign prostatic hyperplasia: AUA Guideline Part I - Initial work-up and medical management. *The Journal of Urology*. 2021; 206:806-817.

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).

USPSTF. Aspirin use to prevent cardiovascular disease: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2022; 327:1577-1584.

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.

Lawton JS, Tamis-Holland JE, Bangalore S, et al. 2021 ACC/AHA/SCAI guideline for coronary artery revascularization. *J Am Coll Cardiol*. 2022; 79:e21-e129. Focus on sections: section 11 (Pharmacotherapy in patients undergoing PCI), section 13 (Pharmacotherapy in patients undergoing CABG), Section 14 (Pharmacotherapy in patients after revascularization).

Learning Objectives:

- Describe the 2021 guideline for coronary artery revascularization from the American College of Cardiology (ACC), American Heart Association (AHA), and Society for Cardiovascular Angiography and Interventions (SCAI).
- Develop recommendations for pharmacotherapy in patients undergoing percutaneous coronary intervention (PCI), coronary artery bypass graft (CABG) surgery, or revascularization.

Denfeld QE, Turrise S, MacLaughlin EJ, et al. Preventing and managing falls in adults with cardiovascular disease: a scientific statement from the American Heart Association. *Circ Cardiovasc Qual Outcomes*. 2022; 15:e000108.

Learning Objectives:

- Describe the American Heart Association scientific statement on preventing and managing falls in adults with cardiovascular disease
- Develop recommendations for the prevention and management of falls in adults with cardiovascular disease (CVD)