

**2021 Geriatric Pharmacy Specialty Recertification Literature Study: Module 1A-C
(Cert # L219149)**

Articles and Learning Objectives

Module 1A: Hypothyroidism

ACPE Number: 0204-9999-21-971-H01-P

This module focuses on the clinical practice guidelines and treatments for subclinical hypothyroidism in the elderly.

Bekkering GE, Agoritsas T, Lytvyn L et al. Thyroid hormones treatment for subclinical hypothyroidism: a clinical practice guideline. *BMJ*. 2019;365:l2006.

Learning Objectives:

- Describe the clinical practice guideline from the MAGIC group and The British Medical Journal for the management of subclinical hypothyroidism in adult and elderly patient.
- Develop recommendations for the management of subclinical hypothyroidism in adult and elderly patients.

Blum MR, Gencer B, Adam L et al. Impact of thyroid hormone therapy on atherosclerosis in the elderly with subclinical hypothyroidism: a randomized trial. *J Clin Endocrinol Metab*. 2018; 103(8):2988-97.

Learning Objectives:

- Describe the study of thyroid hormone therapy on atherosclerosis in the elderly with subclinical hypothyroidism.
- Develop recommendations for the use of thyroid hormone therapy in patients with atherosclerosis and subclinical hypothyroidism.

de Montmollin M, Feller M, Beglinger S et al. L-thyroxine therapy for older adults with subclinical hypothyroidism and hypothyroid symptoms. Secondary analysis of a randomised trial. *Ann Intern Med*. 2020; 172(11):706-16.

Learning Objectives:

- Describe the study of L-thyroxine for subclinical hypothyroidism and hypothyroid symptoms in older adults.
- Develop recommendations for the use of L-thyroxine in older adults with subclinical hypothyroidism and hypothyroid symptoms.

Mooijaart SP, DuPuy RS, Stott DS et al. Association between levothyroxine treatment and thyroid-related symptoms among adults aged 80 years and older with subclinical hypothyroidism. *JAMA*. 2019; 322(20):1977-86.

Learning Objectives:

- Describe the study of levothyroxine treatment for subclinical hypothyroidism in adults 80 years of age and older.
- Develop recommendations for the use of levothyroxine in patients 80 years of age and older with subclinical hypothyroidism.

Stott DJ, Rodondi N, Kearney PM et al. Thyroid hormone therapy for older adults with subclinical hypothyroidism. *N Engl J Med*. 2017; 376(26):2534-44.

Learning Objectives:

- Describe the study of thyroid hormone therapy for subclinical hypothyroidism in older adults.
- Develop recommendations for the use of thyroid hormone therapy in older adults with subclinical hypothyroidism.

Stott DJ, Gussekloo J, Kearney PM et al. Study protocol; thyroid hormone replacement for untreated older adults with subclinical hypothyroidism - a randomised placebo controlled trial (TRUST). *BMC Endocrine Disorders*. 2017; 17(6). DOI:<https://doi.org/10.1186/s12902-017-0156-8>. February 3, 2017.

Learning Objectives:

- Describe the study of thyroid hormone replacement for subclinical hypothyroidism in older adults.
- Develop recommendations for the use of thyroid hormone replacement in older adults with subclinical hypothyroidism.

Module 1B: Infectious Diseases

ACPE Number: 0204-9999-21-972-H01-P

This module focuses on infectious diseases in the elderly, specifically asymptomatic bacteriuria, community-acquired pneumonia, and influenza, and vaccination efficacy.

Andrew MK, Bowles SK, Pawelec G et al. Influenza vaccination in older adults: recent innovations and practical applications. *Drugs & Aging*. 2019; 36:29-37.

Learning Objectives:

- Describe the study of vaccinations for influenza in older adults.
- Develop recommendations for the use of influenza vaccinations in older adults.

Aspinall R, Olivier Lang P. Vaccination choices for older people, looking beyond age specific approaches. *Expert Rev Vaccines*. 2018; 17(1):23-30.

Learning Objectives:

- Describe vaccination choices for older adults.
- Develop recommendations for vaccinations in older adult patients.

Metlay JP, Waterer GW, Long AC et al. Diagnosis and treatment of adults with community-acquired pneumonia: an official clinical practice guideline of the American Thoracic Society and Infectious Diseases Society of America Executive Summary. *Am J Respir Crit Care Med*. 2019; 200(7):809-21.

Learning Objectives:

- Describe the clinical practice guideline from the American Thoracic Society and Infectious Diseases Society of America for the management of community-acquired pneumonia in older adults.
- Develop recommendations for the management of community-acquired pneumonia in older adults.

Nicolle LE, Gupta K, Bradley SF et al. Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America. *Clin Infect Dis*. 2019; 68(10): e83-75.

Learning Objectives:

- Describe the clinical practice guideline from the Infectious Diseases Society of America for the management of asymptomatic bacteriuria in older adults.
- Develop recommendations for the management of asymptomatic bacteriuria in older adults.

Module 1C: Parkinson's Disease
ACPE Number: 0204-9999-21-973-H01-P

This module focuses on treatment guidelines, efficacy of istradefylline for gait disorders, atypical antipsychotics, levodopa, and nonmotor symptoms therapies for Parkinson's Disease in the elderly.

Grimes D, Fitzpatrick M, Gordon J et al. Canadian guideline for Parkinson disease. *CMAJ*. 2019; 191(36):E989-1004.

Learning Objectives:

- Describe the clinical practice guideline from Parkinson Canada for the management of Parkinson's Disease in patients with this disease.
- Develop recommendations for the management of Parkinson's Disease in patients with this disease.

Iijima M, Orimo S, Terashi H et al. Efficacy of istradefylline for gait disorders with freezing of gait in Parkinson's disease: a single-arm, open-label, prospective, multicenter study. *Expert Opin Pharmaco*. 2019; 20(11):1405-11.

Learning Objectives:

- Describe the study of istradefylline for gait disorders in Parkinson's Disease patients.
- Develop recommendations for the use of istradefylline in patients with Parkinson's Disease.

Seppi K, Chaudhuri KR, Coelho M et al. Update on treatments for nonmotor symptoms of Parkinson's Disease---an evidence-based medicine review. *Movement Disorders*. 2019; 34(2):180-98.

Learning Objectives:

- Describe the study on treatments for nonmotor symptoms of Parkinson's Disease.
- Develop recommendations for the treatments for nonmotor symptoms in Parkinson's Disease patients.

Verschuur CVM, Suwijn SR, Boel JA et al. Randomized delayed-start trial of levodopa in Parkinson's Disease. *N Engl J Med*. 2019; 380(4):315-24.

Learning Objectives:

- Describe the study of levodopa for Parkinson's Disease in adult patients.
- Develop recommendations for the use of levodopa in older patients with Parkinson's Disease.

Zhang H, Wang L, Fan Y et al. Atypical antipsychotics for Parkinson's disease psychosis: a systematic review and meta-analysis. *Neuropsychiatr Dis Treat*. 2019; 15:2137-49.

Learning Objectives:

- Describe the study of atypical antipsychotics for Parkinson's Disease psychosis in older adults.
- Develop recommendations for the use of atypical antipsychotics in older adult patients with Parkinson's Disease psychosis.