2020 Infectious Diseases Pharmacy Specialty Recertification Literature Study: Module 1A-B (Cert # L209147)

Learning Objectives

Module 1A: HIV and Hepatitis C 0204-0000-20-944-H01-P

This module focuses on pre- and post-exposure prophylaxis of HIV, as well as management of patients with HIV and/or Hepatitis C.

Swindells S, Ramchandani R, Gupta A, et al. for the BRIEF TB/A5279 Study Team. One month of rifapentine plus isoniazid to prevent HIV-related tuberculosis. *N Engl J Med*. 2019; 380:1001-11.

Learning Objectives:

- Explain the rationale, methodology, findings, limitations, and implications of the BRIEF TB/A5279 study of tuberculosis preventive therapy in patients with human immunodeficiency virus (HIV) infection.
- Develop recommendations for tuberculosis preventive therapy in high-risk patients with human immunodeficiency virus (HIV) infection.

Rodger AJ, Cambiano V, Bruun T, et al. Risk of HIV transmission through condomless sex in serodifferent gay couples with the HIV-positive partner taking suppressive antiretroviral therapy (PARTNER): final results of a multicentre, prospective, observational study. *Lancet*. 2019; 393:2428-38.

Learning Objectives:

- Explain the rationale, methodology, findings, limitations, and implications of the PARTNER study of the risk of HIV transmission through condomless sex in serodifferent gay couples with the HIV-positive partner taking suppressive antiretroviral therapy.
- Develop recommendations for the use of suppressive antiretroviral therapy and condoms by serodifferent gay couples to protect against HIV transmission.

Rockstroh JK, Lacombe K, Viani RM, et al. Efficacy and safety of glecaprevir/pibrentasvir in patients coinfected with hepatitis C virus and human immunodeficiency virus type 1: The EXPEDITION-2 Study; *Clin Infect Dis.* 2018; 67:1010-17.

Learning Objectives:

- Explain the rationale, methodology, findings, limitations, and implications of the EXPEDITION-2 study of glecaprevir coformulated with pibrentasvir in adults coinfected with hepatitis C virus (HCV) and human immunodeficiency virus type 1 (HIV-1).
- Develop recommendations for the use of glecaprevir coformulated with pibrentasvir in adults coinfected with hepatitis C virus (HCV) and human immunodeficiency virus type 1 (HIV-1).

Marks K, Naggie S. Management of hepatitis C in 2019. JAMA. 2019; 322:355-6.

Learning Objectives:

- Discuss recent progress and ongoing challenges in treating hepatitis C virus (HCV) infection in the United States and the recommended approach to diagnostic testing and treatment.
- Compare and contrast the mechanism of action, genotype coverage, duration of therapy, cost, efficacy, and adverse effects of recommended direct-acting antiviral (DAA) regimens for the initial treatment or retreatment of hepatitis C virus (HCV) infection.
- Develop recommendations for the diagnosis and management of hepatitis C virus (HCV), taking into consideration life expectancy, comorbid conditions, HCV genotype, and prior direct-acting antiviral (DAA) exposure.

Centers for Disease Control and Prevention. Updated guidelines for antiretroviral postexposure prophylaxis after sexual, injection drug use, or other nonoccupational exposure to HIV—United States, 2016. Including the Update: Interim Statement Regarding Potential Fetal Harm from Exposure to Dolutegravir – Implications for HIV Post-exposure Prophylaxis (PEP).

Learning Objectives:

- Describe the new recommendations in the 2016 updated guidelines from the Centers for
 Disease Control and Prevention (CDC) for antiretroviral postexposure prophylaxis after sexual,
 injection drug use, or other nonoccupational exposure to HIV.
- Develop recommendations for antiretroviral postexposure prophylaxis after sexual, injection drug use, or other nonoccupational exposure to HIV.

Module 1B: ID Potpourri 0204-0000-20-945-H01-P

This module focuses on new information that is important to the infectious diseases pharmacist, including management of penicillin allergy, considering recombinant zoster vaccine in immunosuppressed patients, and prevention and management of tuberculosis.

Sosa LE, Njie GJ, Lobato MN, et al. Tuberculosis screening, testing, and treatment of U.S. health care personnel: recommendations from the National Tuberculosis Controllers Association and CDC, 2019. *MMWR Morb Mortal Wkly Rep.* 2019; 68:439–43.

Learning Objectives:

- Describe the impetus for, methodology used, and nature of the changes in the 2019 recommendations from the National Tuberculosis Controllers Association and Centers for Disease Control and Prevention for tuberculosis screening, testing, and treatment of health care personnel
- Develop recommendations for tuberculosis (TB) screening, testing, and treatment of health care personnel (HCP), including baseline screening, testing, and individual TB risk assessment; postexposure screening and testing; serial screening and testing for HCP without latent TB infection (LTBI); and evaluation and treatment of positive test results

Colangeli R, Jedrey H, Kim S, et al. for the DMID 01-009/Tuberculosis Trials Consortium Study 22 Teams. Bacterial factors that predict relapse after tuberculosis therapy. *N Engl J Med*. 2018; 379:823-33.

Learning Objectives:

- Explain the rationale, methodology, limitations, and implications of the study of the risk of
 relapse in patients with tuberculosis based on the drug minimum inhibitory concentration for
 the Mycobacterium tuberculosis isolate compared with the standard resistance breakpoint.
- Discuss the model created by Colangeli and colleagues for predicting the risk of relapse in patients with tuberculosis.

Shenoy ES, Macy E, Rowe T, Blumenthal KG, et al. Evaluation and management of penicillin allergy: A review. *JAMA*. 2019; 321:188-99.

Learning Objectives:

- Describe the epidemiology of penicillin allergy, clinical consequences of labeling patients as penicillin allergic, and methods for clinically evaluating patients with a report of penicillin allergy
- Develop a plan for the clinical evaluation of patients with a report of penicillin allergy

Bastidas A, de la Serna J, El Idrissi M, et al. Effect of Recombinant Zoster Vaccine on Incidence of Herpes Zoster After Autologous Stem Cell Transplantation: A Randomized Clinical Trial. *JAMA*. 2019; 322(2):123–33. doi:10.1001/jama.2019.9053

Learning Objectives:

• Explain the rationale, methodology, findings, limitations, and implications of the Zoster Efficacy Study in Patients Undergoing HSCT (ZOE-HSCT)

- Develop recommendations for the use of recombinant zoster vaccine in adults undergoing autologous hematopoietic stem cell transplantation
- Compare and contrast the appropriate use of recombinant zoster vaccine and zoster vaccine live in adults