

2022 Infectious Diseases Pharmacy Specialty Recertification Literature Study: Module 1A-B

Articles and Learning Objectives

Module 1A: HIV and Sexually Transmitted Infections

ACPE Number: 0204-9999-22-946-H01-P

This module focuses on the treatment of HIV infection. Guidelines on the treatment of sexually transmitted infections are also included, focusing on gonorrhea and chlamydia.

Saag MS. HIV infection — screening, diagnosis, and treatment. *N Engl J Med*. 2021; 384(22):2131-2143.

Learning Objectives:

- Describe the screening, diagnosis, and treatment of HIV infection.
- Develop recommendations for the screening, diagnosis, and treatment of HIV infection.

Overton ET, Richmond G, Rizzardini G et al. Long-acting cabotegravir and rilpivirine dosed every 2 months in adults with HIV-1 infection (ATLAS-2M), 48-week results: a randomised, multicentre, open-label, phase 3b, non-inferiority study. *Lancet*. 2020; 396(10267):1994-2005.

Learning Objectives:

- Describe the ATLAS-2M study by Overton and colleagues.
- Develop recommendations for maintenance viral suppressive therapy in patients living with HIV-1 infection with viral suppression.

Workowski KA, Bachmann LH, Chan PA et al. Sexually transmitted infections treatment guidelines, 2021. *MMWR Recomm Rep*. 2021; 70(4): 1-192.

(IMPORTANT: For this Literature Study, only pages 65-80 [chlamydia and gonorrhea] are assessed.)

Learning Objectives:

- Describe the 2021 Centers for Disease Control and Prevention (CDC) treatment guidelines for sexually transmitted infections involving *Chlamydia trachomatis* and *Neisseria gonorrhoeae*.
- Develop recommendations for screening for and treating chlamydial and gonococcal infections.

Module 1B: Treatment Challenges in Gram-Negative Bacterial Infections and Prosthetic Joint Infections

ACPE Number: 0204-9999-22-947-H01-P

This module focuses on the treatment of gram negative infections, including those caused by antibiotic-resistant bacteria. In addition, the optimal duration of treatment of prosthetic joint infections is considered.

Tamma PD, Aitken SL, Bonomo RA et al. Infectious Diseases Society of America guidance on the treatment of extended-spectrum β -lactamase producing Enterobacterales (ESBL-E), carbapenem-resistant Enterobacterales (CRE), and *Pseudomonas aeruginosa* with difficult-to-treat resistance (DTR-*P. aeruginosa*). *Clin Infect Dis*. 2021;72(7):1109-1116.

Learning Objectives:

- Describe the Infectious Diseases Society of America (IDSA) guidance on the treatment of extended-spectrum β -lactamase producing Enterobacterales (ESBL-E), carbapenem-resistant Enterobacterales (CRE), and *Pseudomonas aeruginosa* with difficult-to-treat resistance (DTR-*P. aeruginosa*).
- Develop recommendations for the treatment of extended-spectrum β -lactamase producing Enterobacterales (ESBL-E), carbapenem-resistant Enterobacterales (CRE), and *Pseudomonas aeruginosa* with difficult-to-treat resistance (DTR-*P. aeruginosa*).

Bassetti M, Echols R, Matsunaga Y et al. Efficacy and safety of cefiderocol or best available therapy for the treatment of serious infections caused by carbapenem-resistant gram-negative bacteria (CREDIBLE-CR): A randomised, open-label, multicentre, pathogen-focused, descriptive, phase 3 trial. *Lancet Infect Dis*. 2021; 21(2):226-240.

Learning Objectives:

- Describe the CREDIBLE-CR study by Bassetti and colleagues of cefiderocol for the treatment of serious infections caused by carbapenem-resistant gram-negative bacteria.
- Develop recommendations for the use of cefiderocol to treat adults with serious carbapenem-resistant gram-negative bacterial infections.

Falcone M, Daikos GL, Tiseo G et al. Efficacy of ceftazidime-avibactam plus aztreonam in patients with bloodstream infections caused by metallo- β -lactamase-producing Enterobacterales. *Clin Infect Dis*. 2021; 72(11):1871–1878.

Learning Objectives:

- Describe the study by Falcone and colleagues comparing ceftazidime-avibactam (CAZ-AVI) plus aztreonam (ATM) with other active antibiotics in patients with bloodstream infections (BSIs) caused by metallo- β -lactamase (MBL)-producing Enterobacterales.
- Develop recommendations for the treatment of adults with bloodstream infections (BSIs) caused by metallo- β -lactamase (MBL)-producing Enterobacterales.

Sutton JD, Stevens VW, Chang NC et al. Oral β -lactam antibiotics vs fluoroquinolones or trimethoprim-sulfamethoxazole for definitive treatment of Enterobacterales bacteremia from a urine source. *JAMA*

Netw Open. 2020; 3(10):e2020166.

(IMPORTANT: Information contained in the Supplement is also assessed.)

Learning Objectives:

- Describe the study by Sutton and colleagues comparing oral β -lactam antibiotics with a fluoroquinolone or trimethoprim-sulfamethoxazole for the treatment of Enterobacterales bacteremia with a suspected urinary source.
- Develop recommendations for the treatment of adults with Enterobacterales bacteremia with a suspected urinary source.

Bernard L, Arvieux C, Brunschweiler B et al. Antibiotic therapy for 6 or 12 weeks for prosthetic joint infection. *N Engl J Med.* 2021; 384:1991-2001.

Learning Objectives:

- Describe the Duration of Antibiotic Treatment in Prosthetic Joint Infection (DATIPO) study by Bernard and colleagues.
- Develop recommendations for antibiotic therapy for patients with microbiologically confirmed prosthetic joint infections managed with standard surgical procedures.