

fosfomycin (Monurol®)

Fosfomycin is recommended as a first-line agent for treatment of acute uncomplicated cystitis in females in the 2011 IDSA Clinical Practice Guidelines.¹ However, more recent data has demonstrated decreased efficacy when compared to other first-line agents.² As compared with alternative first-line agents, fosfomycin has historically been substantially more expensive (both the hospital acquisition cost and outpatient cost for patients). In addition, many insurance plans do not cover outpatient prescriptions for fosfomycin without prior authorization.

Fosfomycin therapy may be considered in select cases, as outlined below.

Criteria for Use:

1. Management of acute uncomplicated cystitis (must have documented symptoms) and at least one of the following:
 - a. Contraindication to other first-line therapies (e.g., confirmed severe allergy)
 - b. Cultured organism resistant to other first-line agents (e.g., ESBL or resistant *Enterococcus spp.*)
 - c. Documented treatment failure with other first-line agents

Alternatives for Treatment of Acute Uncomplicated Cystitis:

- Nitrofurantoin 100mg PO BID (if CrCl > 30 mL/min) x 5 days
- Cephalexin 500mg PO BID x 5 days
- Levofloxacin 250mg PO daily x 3 days (AVOID unless CrCl ≤ 30 mL/min and confirmed *severe* penicillin allergy)

References:

1. Gupta K, Hooton TM, Naber KG, et al. International clinical practice guidelines for the treatment of acute uncomplicated cystitis and pyelonephritis in women: A 2010 update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases. *Clin Infect Dis*. 2011;52(5):e103-120.
2. Huttner A, Kowalczyk A, Turjeman A, et al. Effect of 5-Day Nitrofurantoin vs Single-Dose Fosfomycin on Clinical Resolution of Uncomplicated Lower Urinary Tract Infection in Women: A Randomized Clinical Trial. *JAMA*. 2018;319(17):1781-1789.