

Guidance on Appropriate Use of Penem Antibiotics

Introduction

Sulopenem/probenecid is an oral antibiotic approved for uncomplicated urinary tract infections (UTIs) in women. Due to [data](#) showing that penem usage promotes cross-resistance to carbapenems, guidance is provided to promote limited use. This document is intended as guidance and does not replace clinical judgement.

Frequently Asked Questions Summary

What is a penem antibiotic?	A penem antibiotic treats extended spectrum beta lactamase (ESBLs) producing gram-negative bacteria ^{1,2} . It does not have activity against <i>Pseudomonas</i> spp., <i>Enterococcus</i> spp., or carbapenem-resistant organisms ^{1,2} . It is not considered a carbapenem because of a structural difference.
What is the approved indication?	Sulopenem etzadroxil and probenecid 500mg/500mg was approved for women with uncomplicated UTIs (e.g., cystitis) caused by <i>E. coli</i> , <i>Klebsiella pneumoniae</i> , and <i>Proteus mirabilis</i> with limited or no alternative oral antibiotic options ¹ .
What are some treatment considerations?	<p>It should not be used for complicated UTIs (including pyelonephritis and prostatitis), intra-abdominal infections, or as a step-down option after parenteral treatment for these syndromes due to inferiority compared to standard of care, such as ertapenem and fluoroquinolones in clinical trials³</p> <p>The probenecid component inhibits renal transporters, altering the metabolism of multiple common medications. Check for drug-drug interactions when prescribing.</p> <p>Susceptibility testing for sulopenem is not available as of March 2026.</p> <p>Sulopenem is a branded drug. Therefore, it may be more expensive than available alternatives or subject to prior authorization through insurance.</p>
What is its place in therapy?	<p>Preferred treatment options for uncomplicated UTI due to ESBLs are nitrofurantoin and trimethoprim-sulfamethoxazole⁴. Second-line agents include ciprofloxacin, levofloxacin⁴, and penems. Third line agents include IV carbapenems and aminoglycosides⁴.</p> <p>Sulopenem should be reserved for situations in which other oral options cannot be used due to patient-specific factors (e.g., previous cultures, allergies, etc). If you are unsure if this is the right antibiotic for your patient, consult an infectious disease or antimicrobial stewardship expert before prescribing.</p>

References:

1. [Orlynvah. Package Insert. Iterum Therapeutics; 2025](#)
2. [Zheng, T. Five Interesting Things to Know About Sulopenem.15 Jan 2025](#)
3. [FDA. FDA Approves New Treatment for Uncomplicated UTIs. 24 October 2024.](#)
4. [Tamma P, Heil E et al. IDSA 2024 Guidance on the Treatment of Antimicrobial-Resistant Gram-Negative Infections. Clin Infect Dis. 2024 Aug 7:ciae403](#)



420-705 | Mar 2026

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email doh.information@doh.wa.gov.