

## **Ertapenem:**

**Class:** Antibiotic.

### **Indications:**

Treatment of the following moderate-to-severe infections: Complicated intra-abdominal infections, complicated skin and skin structure infections (including diabetic foot infections without osteomyelitis, animal and human bites), complicated UTI (including pyelonephritis), acute pelvic infections (including postpartum endomyometritis, septic abortion, postsurgical gynecologic infections), and community-acquired pneumonia. Prophylaxis of surgical site infection following elective colorectal surgery. Antibacterial coverage includes aerobic gram-positive organisms, aerobic gram-negative organisms, and anaerobic organisms.

**Available dosage form in the hospital:** 1G INJ

### **Trade Names:**

### **Dosage:**

- Community-acquired pneumonia and complicated urinary tract infections (including pyelonephritis): I.M., I.V.: 1 g daily; duration of total antibiotic treatment: 10-14 days; duration includes possible switch to appropriate oral therapy after at least 3 days of parenteral treatment, once clinical improvement demonstrated. **Note:** The carbapenems, including ertapenem, are preferred agents for *Enterobacter* spp and *Burkholderia pseudomallei*, and are considered alternative agents for anaerobes in aspiration pneumonia (IDSA, 2007).
- Intra-abdominal infection: I.M., I.V.: 1 g daily for 5-14 days; **Note:** 2010 IDSA guidelines recommend a treatment duration of 4-7 days (provided source controlled) for community-acquired, mild-to-moderate IAI
- Pelvic infections (acute): I.M., I.V.: 1 g daily for 3-10 days
- Prophylaxis of surgical site following colorectal surgery: I.V.: 1 g given 1 hour preoperatively
- Skin and skin structure infections (excluding diabetic foot infections with osteomyelitis): I.M., I.V.: 1 g daily for 7-14 days. **Notes:** For diabetic foot infections, recommended treatment duration is up to 4 weeks depending on severity of infection and response to therapy (Lipsky, 2012); guidelines recommend ertapenem as a preferred agent for animal bites. (IDSA, 2005).
- Intravenous catheter-related bloodstream infection (unlabeled use): I.V. 1 g daily (Note: Carbapenems, including ertapenem, are preferred agents for extended-spectrum  $\beta$ -lactamase (ESBL)-positive *Escherichia coli* and *Klebsiella*, *Enterobacter*, and *Serratia* [IDSA, 2009].)
- Prosthetic joint infection: *Enterobacter* spp (unlabeled use): I.V.: 1 g every 24 hours for 4-6 weeks (Osmon, 2013)

Renal Impairment:

Adults:

-Cl<sub>cr</sub> >30 mL/minute/1.73 m<sup>2</sup>: No adjustment required

-Cl<sub>cr</sub> ≤30 mL/minute/1.73 m<sup>2</sup> and ESRD: 500 mg/day

-Hemodialysis: When the daily dose is given within 6 hours prior to hemodialysis, a supplementary dose of 150 mg is required following hemodialysis.

-CAPD: I.V.: 500 mg daily (Cardone, 2011)

**Common side effect:** Diarrhea ,Edema , Headache , fatigue , Vomiting , nausea , abdominal pain .

**Pregnancy Risk Factor: B**