

# ERTAPENEM

BRAND NAME	INVANZ, ERTAPENEM JUNO
DRUG CLASS	Carbapenem antibiotic
AVAILABILITY	Vial contains 1 g of ertapenem as ertapenem sodium. Also contains sodium bicarbonate and sodium hydroxide. <sup>1</sup> Contains approximately 6 mmol of sodium. <sup>1</sup>
	Seek specialist advice for patients with severe immediate (IgE mediated) or delayed (T-cell mediated) hypersensitivity to penicillins
pH	7.5 <sup>2</sup>
PREPARATION	<b>For IM injection:</b> reconstitute the vial with 3.2 mL of lidocaine 1% to make an approximate concentration of 250 mg/mL. <sup>1</sup> Do not inject solutions that have been reconstituted with lidocaine intravenously. <b>For IV infusion:</b> reconstitute the vial with 10 mL of water for injections or sodium chloride 0.9% to make an approximate concentration of 100 mg/mL. Further dilute immediately. <sup>1</sup> Shake well to dissolve. The solution is colourless to pale yellow. <sup>1</sup>
STABILITY	Vial: store below 25 °C. <sup>1</sup> Reconstituted solution: if reconstituted with lidocaine 1%, use immediately or store for up to 1 hour at 2 to 8 °C. <sup>1</sup> Infusion solution: stable for 6 hours below 25 °C or for 24 hours at 2 to 8 °C. Use within 4 hours of removal from the fridge. <sup>1</sup> For CoPAT use: there is no information about stability above 25 °C. Infusion solutions of 10 mg/mL and 20 mg/mL in sodium chloride 0.9% prepared in a sterile production unit are stable for 5 days at 2 to 8 °C. <sup>3</sup>
ADMINISTRATION	
<b>IM injection</b>	Inject into the vastus lateralis or gluteal muscle. <sup>1</sup> The ventrogluteal site is preferred for injection into the gluteal muscle.
<b>SUBCUT injection</b>	Has been given as a 30 minute subcutaneous infusion in the treatment of bone and joint infections in patients with limited venous access. <sup>4</sup>
<b>IV injection</b>	Not recommended
<b>IV infusion</b>	Dilute the dose in 50 mL of sodium chloride 0.9% and infuse over 30 minutes. <sup>1</sup>
<b>IV use for infants and children</b>	Dilute the dose to a concentration of 20 mg/mL or less with sodium chloride 0.9% and infuse over 30 minutes. <sup>1</sup>
COMPATIBILITY	
<b>Fluids</b>	Sodium chloride 0.9% <sup>1</sup> , water for injections <sup>1</sup>
<b>Y-site</b>	Ceftolozane-tazobactam <sup>2</sup> , heparin sodium <sup>2</sup> , potassium chloride <sup>2</sup> , tigecycline <sup>2</sup>
INCOMPATIBILITY	
<b>Fluids</b>	Glucose 5% <sup>1,2</sup> , Hartmann's <sup>2</sup> , mannitol <sup>2</sup> , Ringer's <sup>2</sup> , sodium bicarbonate <sup>2</sup>
<b>Drugs</b>	Amiodarone <sup>5</sup> , anidulafungin <sup>2</sup> , caspofungin <sup>2</sup> , dobutamine <sup>5</sup> , droperidol <sup>5</sup> , hydralazine <sup>5</sup> , isavuconazole <sup>2</sup> , midazolam <sup>5</sup> , nicardipine <sup>5</sup> , ondansetron <sup>5</sup> , pentamidine <sup>5</sup> , promethazine <sup>5</sup> , thiopental sodium <sup>5</sup> , verapamil <sup>5</sup>

## REFERENCES

1. Product information. Available from [www.tga.gov.au](http://www.tga.gov.au). Accessed 03/03/2020.
2. McEvoy GK editor. Handbook on injectable drugs. 20th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2018.
3. McQuade MS, Van Nostrand V, Schariter J, Kanike JD, Forsyth RJ. Stability and compatibility of reconstituted ertapenem with commonly used i.v. infusion and coinfusion solutions. *Am J Health-Syst Pharm*, 2004; 61: 38-45.
4. Goutelle S, Valour F, Gagnieu MC, Laurent D, Chidiac C, Ferry T. Population pharmacokinetics and probability of target attainment of ertapenem administered by subcutaneous or intravenous route in patients with bone and joint infection. *J Antimicrob Chemother* 2018; 73: 987-94.
5. Ertapenem sodium. In: IV index [internet]. Trissel's 2 clinical pharmaceuticals database (parenteral compatibility). Greenwood Village, CO: Truven Health Analytics. Accessed 26/08/2019.