

CEFTOLOZANE with TAZOBACTAM

BRAND NAME ZERBAXA
DRUG CLASS Cephalosporin antibiotic with beta lactamase inhibitor.
AVAILABILITY Vial contains 1 g of ceftolozane as ceftolozane sulfate and 500 mg of tazobactam as tazobactam sodium. Also contains sodium chloride, arginine and citric acid.¹ Contains 230 mg or 10 mmol of sodium.²

WARNING Contraindicated in patients with severe immediate (IgE mediated) or severe delayed (T-cell mediated) hypersensitivity to penicillins. Seek specialist advice for patients with non-severe immediate hypersensitivity to penicillins.

pH 6²

PREPARATION Reconstitute the vial with 10 mL of water for injections or sodium chloride 0.9%. Shake gently to dissolve. The final volume is approximately 11.4 mL and the concentration is approximately 132 mg/mL of ceftolozane and tazobactam.¹ The solution is clear and colourless to light yellow.¹ Dilute further before use.¹

STABILITY Vial: store at 2 to 8 °C. Protect from light.¹
Reconstituted solution: stable for 24 hours at 2 to 8 °C.¹
For CoPAT use: solutions of 1 g/500 mg in 100 mL of glucose 5% or sodium chloride 0.9% are stable for 24 hours at room temperature. Solutions prepared in a sterile production unit are stable for 10 days at 5 °C.³
Solutions of up to 6 g/3 g in sodium chloride 0.9% in 240 mL elastomeric infusors are stable for 24 hours at 37 °C, protected from light.⁴

ADMINISTRATION

IM injection Not recommended
SUBCUT injection Not recommended
IV injection Not recommended¹
IV infusion To give a 1 g/500 mg dose, withdraw the entire contents of the reconstituted solution and add to 100 mL of a compatible fluid. Infuse over 1 hour.¹ See the table below for alternative doses:¹

Dose required	Volume of reconstituted solution	Volume of compatible fluid
500 mg/250 mg	5.7 mL	100 mL
250 mg/125 mg	2.9 mL	100 mL
100 mg/50 mg	1.2 mL	100 mL

The total daily dose may be given as a 24 hour continuous infusion in the community setting.^{5,6}

COMPATIBILITY

Fluids Glucose 5%¹, sodium chloride 0.9%¹
Y-site Morphine sulfate.⁷ For **2 hours**: amiodarone⁷, anidulafungin⁷, azithromycin⁷, aztreonam⁷, calcium chloride⁷, calcium gluconate⁷, ciprofloxacin⁷, cistaraatrium⁷, colistin⁷, daptomycin⁷, dexamethasone⁷, dexmedetomidine⁷, digoxin⁷, eptafiditide⁷, ertapenem (in sodium chloride 0.9%)⁷, esmolol⁷, esomeprazole⁷, filgrastim (in glucose 7%), furosemide⁷, glyceryl trinitrate⁷, heparin sodium⁷, hydrocortisone sodium succinate⁷, hydromorphone⁷, insulin (Actrapid)⁷, isavuconazole⁷, labetalol⁷, lidocaine⁷, linezolid⁷, lorazepam⁷, magnesium sulfate⁷, mannitol⁷, metoclopramide⁷, metronidazole⁷, micafungin⁷, midazolam⁷, milrinone⁷, mycophenolate⁷, octreotide⁷, piperacillin-tazobactam (EDTA-free)⁷, potassium chloride⁷, ranitidine⁷, rocuronium⁷, sodium bicarbonate⁷, tacrolimus⁷, tigecycline⁷, vancomycin⁷, vecuronium⁷

INCOMPATIBILITY

Albumin⁷, aminoglycosides: amikacin, gentamicin, tobramycin⁷, caspofungin⁷, ciclosporin⁷, nicardipine⁷

REFERENCES

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3. Terracciano J, Rhee E, Walsh J. Chemical stability of ceftolozane/tazobactam in polyvinylchloride bags and elastomeric pumps. *Current Therapeutic Research* 2017; 84: 22-5.
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6. Jones BM, Huefner K, Bland CM. Clinical and safety evaluation of continuously infused ceftolozane/tazobactam in the outpatient setting. *Open Forum Infect Dis* 2020 Feb 7: ofaa014.
7. McEvoy GK editor. *Handbook on injectable drugs*. 20th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2018.