cefaZOLIN

BRAND NAME: CEFAZOLIN AFT, ALPHAPHARM, HOSPIRA, JUNO

DRUG CLASS: Cephalosporin antibiotic

AVAILABILITY: Vial contain 500 mg, 1 g or 2 g of cefazolin as cefazolin sodium. Each 1 g contains 2.1 mmol of sodium.[1]

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: 4.5–6 when reconstituted[1]

PREPARATION

For IM use: reconstitute the 500 mg vial with 2 mL and the 1 g vial with 2.5 mL of water for injections or lidocaine 0.5%. Shake well and warm in the hands to aid dissolution. Final volumes are 2.2 mL and 3 mL and the approximate concentrations are 225 mg/mL and 330 mg/mL respectively.[1] Do not reconstitute the vial with sodium chloride 0.9% as small crystals may form and they may be difficult to see.[2] Solutions reconstituted with lidocaine must not be injected intravenously.

For IV use: reconstitute the vial with at least 10 mL of water for injections.[1]

If a part-dose is required, use the following table to reconstitute the vial:

Vial size	Volume of water for injections	Concentration
500 mg	4.8 mL	100 mg/mL
1 g	9.5 mL	100 mg/mL
2 g	19 mL	100 mg/mL

For intracameral use: must be reconstituted and diluted under aseptic conditions, preferably by pharmacy.

The solution is clear and light yellow.[2]

Powder volume: 500 mg – 0.2 mL, 1 g – 0.5 mL, 2 g –1 mL. [1,3]

STABILITY

Vial: store below 25 °C. Protect from light.[1]

Reconstituted solution: stable for 24 hours at 2 to 8 °C.[1] Crystals may form if the solution is refrigerated. Redissolve by shaking the vial and warming in the hands.[1]

Infusion solution: stable for 24 hours below 25 °C.[2]

For CoPAT use: stable for 24 hours at 37 °C.[4] (based on a solution of 72.2 mg/mL in water for injections). Infusion solutions prepared in a sterile production unit are stable for more than 7 days at 2 to 8 °C.[2]

ADMINISTRATION

IM injection: Suitable[1]

SUBCUT injection: Not recommended

IV injection: Inject slowly over 3 to 5 minutes.[1] A dose of 2 g can be given over at least 5 minutes.

IV infusion: Dilute the dose with 50–100 mL of a compatible fluid and infuse over 10 to 60 minutes.[1] Suitable for doses of 2 to 4 g given once or twice daily.[5]

Doses of 6 to 8 g are given as a 24 hour continuous infusion in the community setting.[5]

IV use for infants and children: Reconstitute to 100 mg/mL or weaker and inject over 3 to 5 minutes. For IV injection in fluid-restricted patients a concentration of 142 mg/mL in water for injections has been used.[6] Or dilute to 20 mg/mL and infuse over 10 to 60 minutes.[7]

Other: Suitable for intracameral injection during eye surgery. Very low doses are used and special preparation is required.[8]

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COMPATIBILITY

Fluids Glucose 5%[1], glucose 10%[1], glucose in sodium chloride solutions[1], Hartmann's[1], Plasma-Lyte 148 via Y-site[9], Ringer's[1], sodium chloride 0.9%[1]

Y-site Aciclovir[2], amifostine[2], anidulafungin[2], atracurium[2,10], aztreonam[2,10], bivalirudin[2], buprenorphine[10], calcium gluconate[10], ciclosporin[10], clindamycin[10], dexamethasone[10], dexmedetomidine[2], digoxin[10], esmolol[2,10], fentanyl[10], filgrastim[2], fluconazole[2,10], foscarnet[2], furosemide[10], glyceryl trinitrate[10], granisetron[2], heparin sodium[2,8], hydrocortisone sodium succinate[10], indomethacin[10], lidocaine[10], linezolid[2], methylprednisolone sodium succinate[10], metoclopramide[10], midazolam[2,10], morphine sulfate[2,10], nicardipine[2], noradrenaline (norepinephrine)[10], palonosetron[2], pethidine[2], potassium chloride[10], ranitidine[10], remifentanil[2], sodium bicarbonate[10], sodium nitroprusside[10], suxamethonium[10], vecuronium[2], verapamil[10]

INCOMPATIBILITY

Fluids No information

Drugs Aminoglycosides: amikacin, gentamicin, tobramycin[1], ascorbic acid[2], azathioprine[11], calcium chloride[11], caspofungin[2], cefotaxime[11], dobutamine[11], dopamine[11], erythromycin[11], ganciclovir[11], haloperidol lactate[11], hydralazine[11], isavuconazole[2], mivacurium[11], mycophenolate mofetil[11], pentamidine[2], phentolamine[11], promethazine[2], protamine[11], pyridoxine[11], rocuronium[1], sodium ascorbate[1]

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