

CLINICAL POLICIES AND PROCEDURES

**NEWBORN USE ONLY
GIVEN ON DOCTORS ORDER ONLY**

TICARCILLIN SODIUM CLAVULANATE

DESCRIPTION Extended spectrum antibiotic with the beta-lactamase inhibitor clavulanic acid in a 30:1 ratio. Used for treatment of NON-CNS infections caused by susceptible β -lactamase-producing bacteria, including many strains of E.coli, Enterobacter, Klebsiella, Haemophilus influenzae, Proteus mirabilis, Pseudomonas spp. and Staph aureus.

PHARMACOKINETICS Ticarcillin is primarily eliminated unchanged by renal mechanisms, whereas clavulanate undergoes significant hepatic metabolism. Mean half- life of ticarcillin is 4.2 hours compared to a mean half-life of 2 hours of clavulanate. **CNS penetration is modest!. Each dose of drug may contain sodium of up to 0.48 mEq/kg body weight.**

PRESENTATION Ticarcillin Sodium 3gm + Potassium Clavulanic Acid 100mg/vial

ROUTE IV infusion only

DOSE 75-100mg/kg/dose

Postnatal age (days)	Interval
0–28	12hrly
≥28	8 hrly

RECONSTITUTION Add 13ml of water for injection to the vial to make a 200 mg/ml solution. **FURTHER DILUTE** 1ml of reconstituted solution with 4ml of water for injection to make a final concentration of 40mg/ml solution.

ADMINISTRATION IV infusion over 30 minutes

MONITORING

1. Assess renal function prior to therapy.
2. Periodic check on serum Na and hepatic transaminases.
3. Observe IV site for extravasation.

ADVERSE EFFECT

1. Eosinophilia
2. Hyperbilirubinemia
3. Elevations in liver enzymes
4. Hyponatremia

SOLUTION COMPATIBILITY 5%dextrose, 0.9%sodium chloride

TERMINAL INJECTION SITE COMPATIBILITY amino acid and fat emulsion, acyclovir, aztreonam, cefepime, famotidine, fluconazole, heparin, insulin, morphine, propfol, theophylline.

INCOMPATIBILITY aminoglycosides, sodium bicarbonate, vancomycin.

REFERENCE

Young TE, Mangum B; Neofax: A Manual of drugs used in neonatal care, ed 14. Raleigh, North Carolina: Acorn Publishing, USA, 2002, p 58-9.
Australian Injectable Drugs Handbook 1997, p 314.