

AMOXICILLIN / CLAVULANATE

Trade Name	Amoxiclav® (IV formulation) (frequently referred to as Augmentin) Augmentin® 125 (GSK) or Curam® (Oral formulation)										
Class	Broad spectrum, beta-lactam, antibiotic										
Mechanism of Action	Inhibits bacterial cell wall synthesis through interaction with penicillin-binding-proteins. Clavulanate is a beta lactamase inhibitor which helps to prevent bacterial resistance secondary to beta- lactamases.										
Indications	Bacterial strains otherwise resistant to amoxicillin										
Contraindications	Hypersensitivity to penicillin History of amoxicillin or penicillin induced hepatic dysfunction.										
Supplied As	IV: 600mg vial (500mg amoxicillin/100mg clavunate) Oral: 125mg amoxicillin + 31.25mg clavulanate per 5mL Chart as 156.25mg per 5mL = 31.25 mg / mL suspension Caution: there are two strengths of oral suspension and injection available check carefully before use.										
Dilution	IV: <table border="1"> <thead> <tr> <th>Vial</th><th>Water Added</th><th>Final Volume</th><th>Concentration</th></tr> </thead> <tbody> <tr> <td>600mg</td><td>11.5mL*</td><td>12mL</td><td>50mg/mL</td></tr> </tbody> </table> Final concentration is based on the total drug components *Displacement value of 600mg amoxicillin/clavulanate is 0.5mL Oral: Add the required volume of sterile water to the bottle and shake well before use. (volumes may vary between brands).			Vial	Water Added	Final Volume	Concentration	600mg	11.5mL*	12mL	50mg/mL
Vial	Water Added	Final Volume	Concentration								
600mg	11.5mL*	12mL	50mg/mL								
Dosage	IV: 30mg/kg/dose Oral: 15 - 30mg/kg/dose Dosing refers to the combination of amoxicillin + clavulanate										
Interval	IV: 12 hourly if < 7 days 8 hourly if ≥ 7 days Oral: 8 hourly										
Administration	IV: Bolus injection over 3 - 4 minutes (If given by infusion the dose should be infused within 4 hours of reconstitution)										
Compatible With	Sodium chloride, Ringers, Lactated Ringers and sodium chloride with potassium chloride. Data on Y-site compatibility with other medicines is very limited.										

Incompatible With	Amikacin, amiodarone, ciprofloxacin, dextrose, gentamicin, midazolam, metronidazole, sodium bicarbonate, tobramycin. Also incompatible with TPN, lipid, blood products.
Interactions	There are no known drug interactions where it is recommended to avoid concomitant use. Amoxicillin/clavulanate may increase methotrexate levels and decrease levels of typhoid injection. Serum conc. of amoxicillin/clavulanate may be increased by allopurinol and decreased by fuscicidic acid and tetracycline
Monitoring	With prolonged use monitor renal and hepatic function
Stability	IV: Prepare immediately before use, inject or dilute within 20 minutes of reconstitution. Oral: once reconstituted, 7 day expiry.
Storage	IV: Store vials at room temperature, protect from light, heat, moisture. Oral: store unopened bottles at room temperature. Once reconstituted, store in the fridge.
Adverse Reactions	Rash, nausea, vomiting, diarrhoea, raised liver enzymes, headache, agitation, increased risk of candidiasis
Metabolism	Amoxicillin is renally cleared and clavulanate is metabolised by the liver. Half life approx 1hr.
Comments	Administer oral doses at the beginning of a feed to help minimise gastric side effects. Note: Dose calculation for Amoxicillin /clavulanate is based on total drug (not amoxicillin component) – see NZFc for details
References	1. BNF for children 2009 2. www.nzf.org.nz 3. Paediatric Dosage Handbook Taketomo et al 16th Ed 2009. 4. Notes on Starship amoxicillin and clavulanic acid for newborn intensive care 5. Starship amoxicillin and clavulanic acid for newborn intensive care 6. Amoxiclav multichem datasheet. Auckland: multichem NZ limited, 2016. 7. www.ANMFonline.org 8. www.micromedex solutions.com
Updated By	A Lynn, B Robertshawe Sept 2010 A Lynn, B Robertshawe June 2012 (re-order profile) B Robertshawe April 2019 (update of oral dosing guideline) A Lynn, M Wallenstein, B Robertshawe, A Evison May 2020 (review /update) A Lynn, B Robertshawe January 2025 (routine update)