Amoxicillin-Clavulunic acid:

Class: Antibiotic

Indications: Treatment of otitis media, sinusitis, and infections caused by susceptible organisms involving the lower respiratory tract, skin and skin structure, and urinary tract; spectrum same as amoxicillin with additional coverage of beta-lactamase producing *B. catarrhalis*, *H. influenzae*, *N. gonorrhoeae*, and *S. aureus* (not MRSA).

Available dosage form in the hospital: AMOXICILLIN 400MG + CLAVULANIC ACID 57MG)/5ML SUSP., AMOXYCILLIN 250MG + CLAVULENIC ACID 375MG TAB, (250/125) TAB, (AMOXICILLIN 125MG + CLAVULANIC ACID 31MG)/5ML SUSP., (AMOXYCILLIN 250MG + CLAVULANIC ACID 62MG)/5ML SUSP., 500/125 MG TAB, 875/125 MG TAB, [AMOXICILLIN1000MG + CLAVULANIC ACID 200MG] VIAL, [AMOXYCILLIN 500MG + CLAVULANIC ACID 100MG] VIAL.

Trade Names:

Dosage:

- -Susceptible infections: Children >40 kg and Adults: Oral: 250-500 mg every 8 hours or 875mg every 12 hours.
- -Acute bacterial rhinosinusitis: Oral: Extended release tablet: 2000 mg every 12 hours for 10 days or 500 mg every 8 hours or 875 mg every 12 hours for 5-7 days Note: May use high-dose therapy (extended release: 2000 mg every 12 hours) if initial therapy fails, in areas with high endemic rates of penicillin-nonsusceptible *S. pneumoniae*, those with severe infections, age >65 years, recent hospitalization, antibiotic use within the past month, or who are immunocompromised (Chow, 2012).
- -Bite wounds (animal/human): Oral: 875 mg every 12 hours or 500 mg every 8 hours
- -Chronic obstructive pulmonary disease: Oral: 875 mg every 12 hours or 500 mg every 8 hours
- -Diabetic foot: Oral: Extended release tablet: Two 1000 mg tablets every 12 hours for 7-14 days
- -Diverticulitis, perirectal abscess: Oral: Extended release tablet: Two 1000 mg tablets every 12 hours for 7-10 days
- -Erysipelas: Oral: 875 mg every 12 hours or 500 mg every 8 hours
- -Febrile neutropenia: Oral: 875 mg every 12 hours
- -Group A streptococci, chronic carrier treatment (IDSA guidelines): 40 mg/kg/day divided every 8 hours (maximum: 2000 mg daily) for 10 days (Shulman, 2012)

-Pneumonia:

- -Aspiration: Oral: 875 mg every 12 hours
- -Community-acquired: Oral: Extended release tablet: Two 1000 mg tablets every 12 hours for 7-10 days

- -Prosthetic joint infection, chronic antimicrobial suppression, oxacillinsusceptible *Staphylococci* (alternative to cephalexin or cefadroxil) (unlabeled use): 500 mg 3 times daily (Osmon, 2013)
- -Pyelonephritis (acute, uncomplicated): Oral: 875 mg every 12 hours or 500 mg every 8 hours
- -Skin abscess: Oral: 875 mg every 12 hours

-Renal Impairment:

- -Cl_{cr} <30 mL/minute: Do not use 875 mg tablet or extended release tablets.
- -Cl_{cr} 10-30 mL/minute: 250-500 mg every 12 hours
- -Cl_{cr} <10 mL/minute: 250-500 every 24 hours
- -Hemodialysis: Moderately dialyzable (20% to 50%) 250-500 mg every 24 hours; administer dose during and after dialysis. Do not use extended release tablets.
- -Peritoneal dialysis: Moderately dialyzable (20% to 50%) .Amoxicillin: Administer 250 mg every 12 hours

Clavulanic acid: Dose for Cl_{cr} <10 mL/minute

Common side effect: Diarrhea ,skin rash, urticarial, Abdominal discomfort ,nausea, vomiting

Pregnancy Risk Factor: B