

(including *Staphylococcus epidermidis*), *Corynebacterium* species, *Bacillus anthracis*, *Listeria monocytogenes*.

Anerobes: *Clostridium* species, *Peptococcus* species, *Peptostreptococcus*

Gram negative:

Aerobes: *Haemophilus influenzae*, *Moraxella catarrhalis*, (*Branhamella catarrhalis*) *Escherichia coli*, *Proteus mirabilis*, *Proteus vulgaris*, *Klebsiella* species, *Salmonella* species, *Neisseria gonorrhoeae*, *Neisseria meningitidis*, *Vibrio cholerae*, *Pasteurella multocida*

Anaerobes: *Bacteroides* species, including *B. fragilis*

#### DRUG INTERACTIONS:

Probenicid decreases the renal tubular secretion of amoxicillin but does not affect clavulanic acid excretion. Concurrent use with co-amoxiclav may result in increased and prolonged blood levels of amoxicillin but not of clavulanic acid.

Co-amoxiclav may reduce the efficacy of oral contraceptives and patients should be warned accordingly.

Penicillins such as co-amoxiclav may decrease the removal of methotrexate from the body increasing the risk of toxicity.

Antibiotics such as co-amoxiclav may alter the effect of anticoagulants such as warfarin.

Intravenous administration can cause local irritation, induration and phlebitis at the injection site.

#### CONTRAINDICATIONS:

Co-amoxiclav is contraindicated in patients with a history of allergic reactions to any penicillin. It is also contraindicated in patients with a previous history of amoxicillin-potassium clavulanate-associated cholestatic jaundice/hepatic dysfunction.

#### SPECIAL WARNING AND SPECIAL PRECAUTIONS FOR USE:

Changes in liver function tests have been observed in some patients receiving Co- amoxiclav. The clinical significance of these changes is uncertain but Co-amoxiclav should be used with caution in patients with evidence of hepatic dysfunction.

Cholestatic jaundice, which may be severe, but is usually reversible, has been reported rarely. Signs and symptoms may not become apparent for several weeks after treatment has ceased.

In patients with renal impairment, dosage should be adjusted according to the degree of impairment

If the parenteral administration of high doses is necessary, the sodium content must be taken into account in patients on a sodium restricted diet.

In patients with reduced urine output crystalluria has been observed very rarely, predominantly with parenteral therapy. During administration of high doses of amoxicillin it is advisable to maintain adequate fluid intake and urinary output in order to reduce the possibility of amoxicillin crystalluria. Amoxicillin has been reported to precipitate in bladder catheters after intravenous administration of large doses. A regular check of potency should be maintained.

Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. These reactions are more likely to occur in individuals with a history of penicillin hypersensitivity.

Erythematous rashes have been associated with glandular fever in patients receiving amoxicillin.

Prolonged use may also occasionally result in overgrowth of non-susceptible organisms.

#### PREGNANCY AND LACTATION:

Reproduction studies in animals (mice and rats) with orally and parenterally administered Co-amoxiclav have shown no teratogenic effects. In a single study in women with preterm, premature rupture of the foetal membrane (pPROM), it was reported that prophylactic treatment with Co-amoxiclav may be associated with an increased risk of necrotising enterocolitis in neonates. As with all medicines, use should be avoided in pregnancy, especially during the first trimester, unless considered essential by the physician.

Co-amoxiclav may be administered during the period of lactation. With the exception of the risk of sensitisation, associated with the excretion of trace quantities in breast milk, there are no known detrimental effects for the breast-fed infant.

#### ADVERSE REACTIONS:

Adverse reactions are uncommon and mainly of a mild and transitory nature.

##### Gastrointestinal reactions:

Diarrhea, indigestion, nausea, vomiting, and mucocutaneous candidiasis have been reported. Antibiotic-associated colitis (including pseudomembranous colitis and haemorrhagic colitis) has been reported rarely. Nausea, although uncommon, is more often associated with higher oral dosages. If gastrointestinal side effects occur with oral therapy they may be reduced by taking Co-amoxiclav at the start of meals.

Superficial tooth discolouration has been reported rarely, mostly with the suspension. It can usually be removed by brushing.

##### Renal and urinary tract disorders:

Crystalluria has been reported very rarely

##### Genito-urinary effects:

Vaginal itching, soreness and discharge may occur.

##### Hepatic effects:

Moderate and asymptomatic rises in AST and/or ALT and alkaline phosphatases have been reported occasionally. Hepatitis and cholestatic jaundice have been reported rarely. These hepatic reactions have been reported more commonly with Co-amoxiclav than with other penicillins.

After Co-amoxiclav hepatic reactions have been reported more frequently in males and elderly patients, particularly those over 65 years. The risk increases with duration of treatment longer than 14 days. These reactions have been very rarely reported in children. Signs and symptoms usually occur during or shortly after treatment but in some cases may not occur until several weeks after treatment has ended. Hepatic reactions are usually reversible but they may be severe and, very rarely, deaths have been reported.

##### Hypersensitivity reactions:

Urticarial and erythematous skin rashes sometimes occur. Rarely erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, bullous exfoliative dermatitis, acute generalised exanthematous pustulosis (AGEP), serum sickness-like syndrome and hypersensitivity vasculitis have been reported. Treatment should be discontinued if one of these disorders occurs. In common with other Beta-lactams antibiotics angioedema and anaphylaxis have been reported. Interstitial nephritis can occur rarely.

##### Haematological effects:

As with other Beta-lactams transient leucopenia (including neutropenia and agranulocytosis), thrombocytopenia and haemolytic anaemia have been reported rarely. Prolongation of bleeding time and prothrombin time has also been reported rarely.

##### CNS effects:

CNS effects have been seen very rarely. These include reversible hyperactivity, dizziness, headache and convulsions. Convulsions may occur with impaired renal function or in those receiving high doses.

##### Local:

Thrombophlebitis at the site of injection has been reported occasionally.

#### OVERDOSAGE:

Gastrointestinal symptoms and disturbance of the fluid and electrolyte balances may be evident. They may be treated symptomatically with attention to the water electrolyte balance. Co-amoxiclav may be removed from the circulation by haemodialysis.

Amoxicillin crystalluria, in some cases leading to renal failure, has been observed.

#### INCOMPATIBILITIES:

Co-amoxiclav injection should **NOT** be mixed or reconstituted with dextrose solution, sodium bicarbonate solution for injection, protein hydrolysates and other proteinaceous fluids, blood or plasma or with intravenous lipid emulsions.

If Co-amoxiclav is prescribed concurrently with an aminoglycoside, the antibiotics should not be mixed in the syringe, intravenous fluid container or giving set because loss of activity of the aminoglycoside can occur under these conditions.

#### CAUTION:

Foods, Drugs, Devices and Cosmetics Act prohibits dispensing without prescription.

**For suspected adverse drug reaction, report to the FDA: [www.fda.gov.ph](http://www.fda.gov.ph)**

#### DOSAGES FOR TREATMENT OF INFECTIONS:

Direction for reconstitution:

Co-amoxiclav (Natravox) 600mg IV

Dissolve the powder in 10mL Water For Injection

Co-amoxiclav (Natravox) 1.2g IV

Dissolve the powder in 20mL Water For Injection

For intravenous infusion: the reconstituted vial should be further diluted with the desired volume of a suitable infusion fluid.