

# AMOCLAVAN® 600

(Amoxicillin and Clavulanic acid)

## ACTION

Amoclan 600 is an oral antibacterial combination consisting of the semisynthetic antibiotic amoxicillin and the  $\beta$ -lactamase inhibitor clavulanate potassium (the potassium salt of clavulanic acid).

Amoxicillin is a semisynthetic antibiotic with a broad spectrum of bactericidal activity against many gram-positive and gram-negative microorganisms. Amoxicillin is, however, susceptible to degradation by  $\beta$ -lactamases, and therefore, the spectrum of activity does not include organisms which produce these enzymes. Clavulanic acid possesses the ability to inactivate a wide range of  $\beta$ -lactamase enzymes that are commonly found in microorganisms resistant to penicillins and cephalosporins. The clavulanic acid component in Amoclan 600 protects amoxicillin from degradation by  $\beta$ -lactamase enzymes and effectively extends the antibiotic spectrum of amoxicillin to include many bacteria normally resistant to amoxicillin. Thus, Amoclan 600 possesses the distinctive properties of a broad-spectrum antibiotic and a  $\beta$ -lactamase inhibitor. Amoxicillin/clavulanic acid has been shown to be active against most strains of the following microorganisms:

### Aerobic Gram-Positive Microorganisms:

- *Streptococcus pneumoniae* (including isolates with penicillin MICs  $\leq 2$  mcg/ml),
- *Staphylococcus aureus* (including  $\beta$ -lactamase producing strains),
- *Streptococcus pyogenes*.

**NOTE:** *Staphylococci* which are resistant to methicillin/oxacillin, must be considered resistant to amoxicillin/clavulanic acid.

### Aerobic Gram-Negative Microorganisms:

- *Haemophilus influenzae* (including  $\beta$ -lactamase producing strains),
- *Moraxella catarrhalis* (including  $\beta$ -lactamase producing strains).

## INDICATIONS

Amoclan 600 is indicated for the treatment of pediatric patients with recurrent or persistent respiratory tract infections mainly in acute otitis media due to *S. pneumoniae* (penicillin MICs  $\leq 2$  mcg/ml), *H. influenzae* (including  $\beta$ -lactamase producing strains), or *M. catarrhalis* (including  $\beta$ -lactamase producing strains). Amoclan 600 is not indicated for the treatment of infections due to *S. pneumoniae* with penicillin MICs  $\geq 4$  mcg/ml.

## DOSAGE AND ADMINISTRATION

Amoclan 600, does not contain the same amount of clavulanic acid (as the potassium salt) as any of the other suspensions of Amoclan. Amoclan 600 contains 42.9 mg of clavulanic acid per 5 ml, whereas the 200 mg/5 ml suspension of Amoclan contains 28.5 mg of clavulanic acid per 5 ml and the 400 mg/5 ml suspension contains 57 mg of clavulanic acid per 5 ml.

### Dosage:

#### • Pediatric patients 3 months and older:

Based on the amoxicillin component (600 mg/5 ml), the recommended dose of Amoclan 600 is 90 mg/kg/day divided every 12 hours, administered for 10 days.

Body Weight (kg)	Volume of Amoclan 600 providing (90mg/kg/day)
8	3.0 ml twice daily
12	4.5 ml twice daily
16	6.0 ml twice daily
20	7.5 ml twice daily
24	9.0 ml twice daily
28	10.5 ml twice daily
32	12.0 ml twice daily
36	13.5 ml twice daily

#### Pediatric patients weighing 40 kg and more:

Experience with Amoclan 600 (600 mg/5 ml formulation) in this group is not available.

### Adults:

Experience with Amoclan 600 (600 mg/5 ml formulation) in adults is not available, and adults who have difficulty swallowing should not be given Amoclan 600 (600 mg/5 ml) in place of the 500 mg or 875 mg tablet of Amoclan.

## CONTRAINDICATIONS

Amoclan 600 is contraindicated in patients with a history of allergic reactions to any penicillin. It is also contraindicated in patients with a previous history of cholelithiasis/ jaundice/ hepatic dysfunction.

## WARNINGS

Serious hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more likely to occur in individuals with a history of penicillin hypersensitivity and/or a history of sensitivity to multiple allergens. Before initiating therapy with Amoclan 600, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, or other allergens. If an allergic reaction occurs, Amoclan 600 should be discontinued and the appropriate therapy substituted. Pseudomembranous colitis has been reported with nearly all antibacterial agents, including amoxicillin/clavulanate potassium. Therefore, it is important to consider this diagnosis in patients who present with diarrhea subsequent to the administration of antibacterial agents. Amoclan 600 should be used with caution in patients with evidence of hepatic dysfunction. Hepatic toxicity associated with the use of amoxicillin/clavulanate potassium is usually reversible.

## PRECAUTIONS

### General:

While amoxicillin/clavulanate possesses the characteristic low toxicity, periodic assessment of organ system functions, including renal, hepatic, and hematopoietic function, is advisable if therapy is for longer than the drug is approved for administration. Ampicillin-class antibiotics should not be administered to patients with mononucleosis. The possibility of super-infections with mycotic or bacterial pathogens should be kept in mind during therapy. If super-infections occur, (usually involving *Pseudomonas* or *Candida*), the drug should be discontinued and/or appropriate therapy substituted.

### Phenylketonurics:

Each 5 ml of the 600 mg/5 ml suspension of Amoclan 600 contains 7 mg phenylalanine.

### Drug Interactions:

Probenecid decreases the renal tubular secretion of amoxicillin. Concurrent use with Amoclan 600 may result in increased and prolonged blood levels of amoxicillin. Co-administration of probenecid cannot be recommended. Administration of allopurinol and ampicillin increases substantially the incidence of rashes in patients receiving both drugs as compared to patients receiving ampicillin alone. As it is common with other broad-spectrum antibiotics, amoxicillin/clavulanate may reduce the efficacy of oral contraceptives.

### SIDE EFFECTS

Amoxicillin and clavulanate is generally well tolerated. The majority of side effects observed in pediatric clinical trials were either mild or moderate, and transient in nature; 4.4% of patients discontinued therapy because of drug-related side effects. The most commonly reported side effects were: dermatitis, i.e., diaper rash (3.5%), diarrhea (2.9%), vomiting (2.2%), moniliasis (1.4%), and rash (1.1%). The following adverse reactions have been reported for ampicillin-class antibiotics:

**Gastrointestinal:** Diarrhea, nausea, vomiting, indigestion, gastritis, stomatitis, glossitis, black tongue, mucocutaneous candidiasis, enterocolitis, and hemorrhagic/ pseudomembranous colitis. Onset of pseudomembranous colitis symptoms may occur during or after antibiotic treatment.

**Hypersensitivity Reactions:** Skin rashes, pruritus, urticaria, angioedema, serum sickness-like reactions, erythema multiforme (rarely Stevens-Johnson syndrome), acute generalized exanthematous pustulosis, and an occasional case of exfoliative dermatitis have been reported. These reactions may be controlled with antihistamines and, if necessary systemic corticosteroids. Whenever such reactions occur, the drug should be discontinued, unless the opinion of the physician dictates otherwise.

**Liver:** A moderate rise in AST (SGOT) and/or ALT (SGPT) has been noted in patients treated with ampicillin-class antibiotics, but the significance of these findings is unknown. Hepatic dysfunction, including increases in serum transaminases (AST and/or ALT), serum bilirubin, and/or alkaline phosphatase, has been infrequently reported with amoxicillin and clavulanic acid. This hepatic dysfunction is usually reversible.

**Renal:** Interstitial nephritis and hematuria have been reported rarely. Crystalluria has also been reported.

**Hemic and Lymphatic Systems:** Anemia, including hemolytic anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been reported during therapy with penicillins. These reactions are usually reversible on discontinuation of therapy and are believed to be hypersensitivity phenomena.

**Central Nervous System:** Agitation, anxiety, behavioral changes, confusion, convulsions, dizziness, insomnia, and reversible hyperactivity have been reported rarely.

**Miscellaneous:** Tooth discoloration (brown, yellow, or gray staining) has been rarely reported. Most reports occurred in pediatric patients. Discoloration was reduced or eliminated with brushing or dental cleaning in most cases.

## OVERDOSAGE

Following overdosage, patients have experienced primarily gastrointestinal symptoms including stomach and abdominal pain, vomiting, diarrhea, rash, hyperactivity, or drowsiness have also been observed in a small number of patients. In the case of overdosage, discontinue Amoclan 600, treat symptomatically, and institute supportive measures as required. If the overdosage is very recent and there is no contraindication, an attempt at emesis or other means of removal of drug from the stomach may be performed. Crystalluria, in some cases leading to renal failure, has also been reported after amoxicillin overdosage in adult and pediatric patients. In case of overdosage, adequate fluid intake and diuresis should be maintained to reduce the risk of amoxicillin crystalluria. Renal impairment appears to be reversible with cessation of drug administration. High blood levels may occur more readily in patients with impaired renal function because of decreased renal clearance of both amoxicillin and clavulanate. Both amoxicillin and clavulanate are removed from the circulation by hemodialysis.

## STORAGE

After reconstitution, keep in refrigerator and use within 10 days.

Store the powder in a dry place below 25°C.

## PRESENTATION

### Suspension

Amoclan 600 mg:

Amoxicillin (as trihydrate) USP 600 mg and clavulanic acid (as potassium) USP 42.9 mg\*

**Excipients:** Xanthan gum, succinic acid, aspartame, hydroxypropyl methylcellulose, orange powder flavour, colloidal silicon dioxide, silicon dioxide. \* per 5 ml (after reconstitution).

## THIS IS A MEDICATION

- A medication is a product which affects your health, and its consumption contrary to instructions is dangerous.
- Follow the doctor's prescription strictly, the method of use and the instructions of the pharmacist who sold the medication.
- The doctor and the pharmacist are experts in medicine, its benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.



Manufactured by:  
HIKMA Pharmaceuticals, Amman-Jordan

Keep medication out of the reach of children  
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