

# AMOXIL® Amoxicillin trihydrate

## QUALITATIVE AND QUANTITATIVE COMPOSITION

AMOXIL Capsules 250 mg contain 250 mg amoxicillin per capsule.  
 AMOXIL Capsules 500 mg contain 500 mg amoxicillin per capsule.  
 AMOXIL Suspension 125 mg contains 125 mg amoxicillin per 5 ml dose.  
 AMOXIL Suspension Forte 250 mg contains 250 mg amoxicillin per 5 ml dose.  
 AMOXIL Paediatric Suspension contains 125 mg amoxicillin per 1.25 ml dose.  
 The amoxicillin is present as the trihydrate in AMOXIL oral presentations.

## PHARMACEUTICAL FORM

AMOXIL Capsules: maroon and gold capsules over printed 'AMOXIL 250' or 'AMOXIL 500'  
 AMOXIL Suspension and Suspension Forte: citrus-flavored suspension. Presented as powder in bottles for preparing 60 ml or 100 ml.  
 AMOXIL Paediatric Suspension: citrus-flavored suspension. Presented as powder in bottles.

## CLINICAL PARTICULARS

### Indications

AMOXIL is a broad spectrum antibiotic indicated for the treatment of commonly occurring bacterial infections such as:  
 Respiratory tract infections e.g. ear, nose and throat infections. Gastrointestinal tract infections e.g. enteric fever. Urinary tract infections. Skin and soft tissue infections. Biliary tract infections. Bone infections. Pelvic infections. Gonorrhoea (non-penicillinase producing strains). Syphilis. Septicaemia. Endocarditis. Meningitis. Peritonitis. Dental abscess (as an adjunct to surgical management).  
 Prophylaxis of endocarditis: AMOXIL may be used for the prevention of bacteraemia associated with procedures such as dental extraction, in patients at risk of developing of endocarditis.

### Dosage and Administration

Adult dosage (including elderly patients):  
 Standard adult dosage: 250 mg 3 times daily, increasing to 500 mg 3 times daily for more severe infections.  
 Dental Abscess: two 3 g doses with 8 hours between the doses, Gonorrhoea 3 g dose.  
 Children's dosage. (up to 10 years of age):  
 Standard children's dosage: 125 mg 3 times daily, increasing to 250 mg 3 times daily for more severe infections  
 Patients with renal impairment.  
 In renal impairment the excretion of the antibiotic will be delayed and, depending on the degree of impairment, it may be necessary to reduce the total daily dosage according to the following scheme.  
 Adults and Children over 40 kg:  
 Mild impairment (creatinine clearance greater than 30 ml/min) - No change in dosage  
 Moderate impairment (creatinine clearance 10 to 30 ml/min) - 500 mg twice a day maximum  
 Severe impairment (creatinine clearance less than 10 ml/min) - 500 mg/day maximum  
 Children under 40 kg:  
 Mild impairment (creatinine clearance greater than 30 ml/min) - No change in dosage  
 Moderate impairment (creatinine clearance 10 to 30 ml/min) - 15 mg/kg twice a day (maximum 500 mg twice daily)  
 Severe impairment (creatinine clearance less than 10 ml/min) - 15 mg/kg once a day (maximum 500 mg)  
 Prophylaxis of endocarditis: **see table below.**

Parenteral therapy is indicated if the oral route is considered impracticable or unsuitable, and particularly for the urgent treatment of severe infection.  
 In renal impairment the excretion of the antibiotic will be delayed and depending on the degree of impairment, it may be necessary to reduce the total daily dosage.

### Contraindications

Amoxicillin is penicillin and should not be given to patients with a history of hypersensitivity to beta-lactam antibiotics (e.g. penicillins, cephalosporins).

### Warnings and Precautions

Before initiating therapy with AMOXIL, careful enquiry should be made concerning previous hypersensitivity reactions to penicillins or cephalosporins. 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 hypersensitivity to beta lactam antibiotics (see Contraindications).  
 Amoxicillin should be avoided if infectious mononucleosis is suspected since the occurrence of a morbilliform rash has been associated with this condition following the use of amoxicillin.  
 Prolonged use may also occasionally result in overgrowth of non-susceptible organisms.  
 Dosage should be adjusted in patients with renal impairment (see Dosage and Administration).  
 In patients with reduced urine output crystalluria has been observed very rarely, predominantly with parenteral therapy. During the 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 (see Overdose).  
 Abnormal prolongation of prothrombin time (increased INR) has been reported rarely in patients receiving AMOXIL and oral anticoagulants. Appropriate monitoring should be undertaken when anticoagulants are prescribed concurrently. Adjustments in the dose of oral anticoagulants may be necessary to maintain the desired level of anticoagulation.  
 AMOXIL suspensions contain sodium benzoate which is a mild irritant to the skin, eyes and mucus membrane. It may increase the risk of jaundice in newborn babies.  
 AMOXIL suspensions may contain aspartame which is a source of phenylalanine and so should be used with caution in patients with phenylketonuria.  
 AMOXIL suspensions may contain sorbitol. If you have been told by your doctor that you have intolerance to some sugars, contact your doctor before taking this medicinal product.

### Interactions

Probenecid decreases the renal tubular secretion of amoxicillin. Concomitant use with AMOXIL may result in increased and prolonged blood levels of amoxicillin.  
 In common with other antibiotics, AMOXIL may affect the gut flora, leading to lower oestrogen reabsorption and reduced efficacy of combined oral contraceptives.  
 Concurrent administration of allopurinol during treatment with amoxicillin can increase the likelihood of allergic skin reactions.  
 Prolongation of prothrombin time has been reported rarely in patients receiving AMOXIL. Appropriate monitoring should be undertaken when anticoagulants are prescribed concurrently.  
 It is recommended that when testing for the presence of glucose in urine during AMOXIL treatment, enzymatic glucose oxidase methods should be used. Due to the high urinary concentrations of amoxicillin, false positive readings are common with chemical methods.  
 In the literature there are rare cases of increased international normalised ratio in patients maintained on acenocoumarol or warfarin and prescribed a course of amoxicillin. If co-administration is necessary, the prothrombin time or international normalised ratio should be carefully monitored with the addition or withdrawal of AMOXIL.

### Pregnancy and Lactation

The safety of this medicinal product for use in human pregnancy has not been established by well controlled studies in pregnant women. Reproduction studies have been performed in mice and rats at doses of up to 10 times the human dose and these studies have revealed no evidence of impaired fertility or harm to the foetus due to amoxicillin. Amoxicillin may be used in pregnancy when the potential benefits outweigh the potential risks associated with treatment.  
 AMOXIL may be given during lactation. With the exception of the risk of sensitisation associated with the excretion of trace quantities of amoxicillin in breast milk, there are no known detrimental effects for the breast-fed infant.

### Effects on Ability to Drive and Use Machines

Adverse effects on the ability to drive or operate machinery have not been observed.

### Adverse Reactions

The following convention has been utilised for the classification of undesirable effects: Very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $< 1/10$ ); uncommon ( $\geq 1/1,000$  to  $\leq 1/100$ ); rare ( $\geq 1/10,000$  to  $\leq 1/1,000$ ); very rare ( $\leq 1/10,000$ ).

The majority of the side-effects listed below are not unique to AMOXIL and may occur when using other penicillins.

Unless otherwise stated, the frequency of adverse events (AE's) has been derived from more than 30 years of post-marketing reports.

### Blood and lymphatic system disorders

Very rare: Reversible leucopenia (including severe neutropenia or agranulocytosis), reversible thrombocytopenia and haemolytic anaemia.

Prolongation of bleeding time and prothrombin time

### Immune system disorders

Very rare: As with other antibiotics, severe allergic reactions, including angioneurotic oedema, anaphylaxis (see Warnings and Precautions), serum sickness and hypersensitivity vasculitis.

If a hypersensitivity reaction is reported, the treatment must be discontinued. (See also Skin and subcutaneous tissue disorders).

### Nervous system disorders

Very rare: Hyperkinesia, dizziness and convulsions. Convulsions may occur in patients with impaired renal function or in those receiving high doses.

### Infections and infestations

Very rare: Mucocutaneous candidiasis

### Gastrointestinal disorders

#Common: Diarrhoea and nausea.

#Uncommon: Vomiting.

Very rare: Antibiotic associated colitis (including pseudomembranous colitis and haemorrhagic colitis). Black hairy tongue

Superficial tooth discolouration has been reported in children. Good oral hygiene may help to prevent tooth discolouration as it can usually be removed by brushing (for suspension only)

### Hepatobiliary disorders

Very rare: Hepatitis and cholestatic jaundice. A moderate rise in AST and/or ALT.

The significance of a rise in AST and/or ALT is unclear.

### Skin and subcutaneous tissue disorders

#Common: Skin rash.

#Uncommon: Urticaria and pruritus.

Very rare: Skin reactions such as erythema multiforme, Stevens - Johnson syndrome, toxic epidermal necrolysis, bullous and exfoliative dermatitis and acute generalised exanthematous pustulosis (AGEP). (See also Immune system disorders).

### Renal and urinary tract disorders

Very rare: Interstitial nephritis, crystalluria (see Overdose)

# incidence of these AEs was derived from clinical studies involving a total of approximately 6,000 adult and paediatric patients taking amoxicillin.

### Overdose

Problems of overdosage with AMOXIL are unlikely to occur. If encountered, gastrointestinal effects such as nausea, vomiting and diarrhoea may be evident and should be treated symptomatically with attention to the water/electrolyte balance.  
 Amoxicillin crystalluria, in some cases leading to renal failure, has been observed (see Warnings and Precautions)  
 AMOXIL can be removed from the circulation by haemodialysis.

## PHARMACOLOGICAL PROPERTIES

### Pharmacodynamics

AMOXIL is a semi-synthetic aminopenicillin of the beta-lactam group of antibiotics. It has a broad spectrum of antibacterial activity against many Gram-positive and Gram-negative micro-organisms, acting through the inhibition of biosynthesis of cell wall mucopeptide.  
 It is rapidly bactericidal and possesses the safety profile of penicillin.

### Pharmacokinetics

AMOXIL is well absorbed. Oral administration, usually at convenient three times a day dosage, produces high serum levels independent of the time at which food is taken. AMOXIL gives good penetration into bronchial secretions and high urinary concentrations of unchanged antibiotic.

Amoxicillin is not highly protein bound; approximately 18% of total plasma drug content is bound to protein. Amoxicillin diffuses readily into most body tissues and fluids, with the exception of the brain and spinal fluid. Inflammation generally increases the permeability of the meninges to penicillins and this may apply to amoxicillin.

The elimination half-life is approximately one hour. The major route of elimination for amoxicillin is via the kidney. Approximately 60 to 70% of AMOXIL is excreted unchanged in urine during the first six hours after administration of a standard dose. AMOXIL is also partly excreted in the urine as the inactive penicilloic acid in quantities equivalent to 10 to 25% of the initial dose.

Concurrent administration of probenecid delays amoxicillin excretion.

## PHARMACEUTICAL PARTICULARS

### Special Precautions for Storage

All presentations should be stored in a dry place, below 25°C.  
 The dry powder should be stored in strictly closed container in a dry place below 25° C. Reconstituted suspensions should be stored in a refrigerator (2-8° C) and used within 14 days.  
 If dilution of the reconstituted suspension is required, water should be used.

### Instructions for Use/Handling

Directions for making up the suspension:

- Check cap seal is intact before use.
- Invert and shake bottle to loosen powder.
- Fill the bottle with water to just below the mark on bottle label.
- Invert and shake well, then top up with water to the mark. Invert and shake again.
- Shake well before taking each dose.

Not all presentations are available in every country.  
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### Manufactured in Saudi Arabia by SPIMACO

Saudi Pharmaceutical Industries & Medical Appliance Corporation

Al-Qassim Pharmaceutical Plant

Under Licence from **GlaxoSmithKline**

**This is a medicament**

- A medicament is a product which affects your health, and its consumption contrary to instructions is dangerous for you.
- Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacists who sold the medicament.
- The doctor and the pharmacists 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.

**Keep medicaments out of the reach of children**  
 Council of Arab Health Ministers  
 Union of Arab Pharmacists



### Prophylaxis of endocarditis:

CONDITION		ADULTS' DOSAGE (INCLUDING ELDERLY)	CHILDREN'S DOSAGE	NOTES
Dental procedures: Prophylaxis for patients undergoing extraction, scaling or surgery involving gingival tissues and who have not received penicillin in the previous month.  (N.B. Patients with prosthetic heart valves should be referred to hospital - see below).	Patient not having general anaesthetic.	3 g AMOXIL orally, 1 hour before procedure. A second dose may be given 6 hours later, if considered necessary.	Under 10 years: half adult dose.  Under 5 years: quarter adult dose.	Note 1. If prophylaxis with AMOXIL is given twice within one month, emergence of resistant streptococci is unlikely to be a problem. Alternative antibiotics are recommended if more frequent prophylaxis is required, or if the patient has received a course of treatment with penicillin during the previous month.  Note 2. To minimise pain on injection, AMOXIL may be given as two injections of 500 mg dissolved in sterile 1% lignocaine solution.
	Patient having general anaesthetic: if oral antibiotics considered being appropriate.	Initially 3 g AMOXIL orally 4 hours prior to anaesthesia, followed by 3 g orally (or 1 g IV or IM if oral dose not tolerated) as soon as possible after the operation.	The use of AMOXIL 500 mg Dispersible Tablets or 750 mg Sachets SF is recommended.	
	Patient having general anaesthetic: if oral antibiotics not appropriate.	1 g AMOXIL IV or IM immediately before induction; with 500 mg orally, 6 hours later.		
Dental procedures: patients for whom referral to hospital is recommended: a) Patients to be given a general anaesthetic who have been given penicillin in the previous month. b) Patients to be given a general anaesthetic who have a prosthetic heart valve. c) Patients who have had one or more attacks of endocarditis.		Initially: 1 g AMOXIL IV or IM with 120 mg gentamicin IV or IM immediately prior to anaesthesia (if given) or 15 minutes prior to dental procedure.  Followed by (6 hours later): 500 mg AMOXIL orally.	Under 10 years: the doses of AMOXIL should be half the adult dose; the dose of gentamicin should be 2 mg/kg.  Under 5 years: the doses of AMOXIL should be quarter the adult dose; the dose of gentamicin should be 2 mg/kg.	See Note 2.  Note 3. AMOXIL and gentamicin should not be mixed in the same syringe. Note 4. Please consult the appropriate data sheet for full prescribing information on gentamicin
Genitourinary Surgery or Instrumentation: prophylaxis for patients who have no urinary tract infection and who are to have genito-urinary surgery or instrumentation under general anaesthesia.		Initially: 1 g AMOXIL IV or IM with 120 mg gentamicin IV or IM, immediately before induction.  Followed by (6 hours later): 500 mg AMOXIL orally or IV or IM according to clinical condition.	Under 10 years: the doses of AMOXIL should be half the adult dose; the dose of gentamicin should be 2 mg/kg.  Under 5 years: the doses of AMOXIL should be quarter the adult dose; the dose of gentamicin should be 2 mg/kg.	See Notes 2, 3 and 4 above.
Obstetric and Gynaecological Procedures and Gastrointestinal Procedures: routine prophylaxis is recommended only for patients with prosthetic heart valves		Followed by (6 hours later): 500 mg AMOXIL orally or IV or IM according to clinical condition.	Under 5 years: the doses of AMOXIL should be quarter the adult dose; the dose of gentamicin should be 2 mg/kg.	
Surgery or instrumentation of the Upper Respiratory Tract	Patients other than those with prosthetic heart valves.	1 g AMOXIL IV or IM immediately before induction; 500 mg AMOXIL IV or IM 6 hours later.	Under 10 years: half adult dose.  Under 5 years: quarter adult dose.	See Note 2 above.  Note 5. The second dose of AMOXIL may be administered orally as AMOXIL Suspension sucrose free.
	Patients with prosthetic heart valves.	Initially: 1 g AMOXIL IV or IM with 120 mg gentamicin IV or IM, immediately before induction; followed by (6 hours later) 500 mg AMOXIL IV or IM.	Under 10 years: the dose of AMOXIL should be half the adult dose; the gentamicin dose should be 2 mg/kg.  Under 5 years: the dose of AMOXIL should be quarter the adult dose; the dose of gentamicin should be 2 mg/kg.	See Notes 2, 3, 4 and 5 above.