AMOKVART

Instructions for the medicinal product

Trade name: Amokvart.
International Nonproprietary Name: Amoxicillin.
Dosage form: Powder for Suspension.
Composition:
Amokvart 125 mg: Each 5 ml of reconstituted suspension contains:
Amoxicillin Trihydrate BP eq. to Amoxicillin 125 mg;
Excipients q.s.
Amokvart 250 mg: Each 5 ml of reconstituted suspension contains:
Amoxicillin Trihydrate BP eq. to Amoxicillin 250 mg;
Excipients q.s.
Pharmacotherapeutic group: Antibiotic. Semisynthetic penicillin.
ATC Code: J01CA04.
Pharmacologic property:
Pharmacodynamics:
Amoxicillin is a broad spectrum antibiotic. It is rapidly bactericidal and possesses the safety profile of a penicillin. Like all penicillins it acts by interfering with the synthesis of the cell wall of the bacterium.
It is active against *aerobic Gram-positive bacteria:* Staphylococcus spp. (Except for strains producing penicillinase), Streptococcus spp. and *aerobic gram-negative bacteria:* Neisseria gonorrhoeae, Neisseria meningitidis, Escherichia coli, Shigella spp., Salmonella spp., Klebsiella spp. Microorganisms producing penicillinase, resistant to the action of amoxicillin.
Pharmacokinetics:
Amoxicillin is rapidly absorbed from the gastro-intestinal tract; it is not converted to ampicillin. It is widely distributed and is reported to product peak antibiotic plasma concentrations that are up to twice as high as those from the same dose of ampicillin. Peak plasma-amoxicillin concentrations of about 5 mcg/ml have been observed 2 hours after a dose of 250mg, with detectable amounts present for up to 8 hours. Doubling the dose can produce double the concentration. The presence of food in the stomach does not appear to diminish absorption significantly.
Up to 20% is bound to plasma proteins in the circulation and plasma half-lives of about one hour have been reported. Amoxicillin diffuses across the placenta: little appears to be excreted in breast milk. It penetrates well into purulent and mucoid sputum and low concentrations have been found in ocular fluid. About 60% of an oral dose is excreted in the urine in six hours.
Following oral administration, the absorption pattern and the bioavailability of amoxicillin in small children may be different to that of adults. Consequently, due to the decreased CL, the exposure is expected to be elevated in this group of patients, although this increase in exposure may in part be diminished by decreased bioavailability when given orally.
Indications for use:
Amoxicillin is a broad-spectrum aminopenicillin and is indicated in the treatment of bacterial infections such as:
- actinomycosis;
- biliary-tract infections;
- bone and joint infections;
- acute exacerbations of chronic bronchitis;
- gastroenteritis (including *Escherichia coli* enteritis and *Salmonella* enteritis, but not shigellosis);
- gonorrhea;
- mouth infections, sinusitis, otitis media, pneumonia (except where *Mycoplasma* suspected);
- typhoid and paratyphoid fever;
- urinary-tract infections;
- bacterial meningitis and the prophylaxis of endocarditis;
- Lyme disease.

Contra-indications:
- hypersensitivity (including to other penicillins, cephalosporins, carbapenems);
- allergic diathesis;
- bronchial asthma;
- hay fever;
- infectious mononucleosis;
- lymphocytic leukemia;
- liver failure;
- gastrointestinal tract history (especially colitis associated with the use of antibiotics);
- lactation.

Precautions: pregnancy, renal failure, bleeding in history.
Dosage and directions for use: :
Adult Dosage (including elderly patients).
Standard Adult Dosage: 5ml of 250mg/5ml suspension three times daily, increasing to 10ml of 250mg/5ml suspension three times daily for more severe infections.
High dose and short course therapies, requiring doses of up to 6 g, daily, a more appropriate dosage form is recommended.
Children
Children weighing more than 40 kg should be given the usual adult dosage.
Children weighing < 40 kg
The daily dosage for children is 40 - 90 mg/kg/day in two to three divided doses* (not exceeding 3 g/day) depending on the indication, severity of the disease and the susceptibility of the pathogen.
*PK/PD data indicate that dosing three times daily is associated with enhanced efficacy, thus twice daily dosing is only recommended when the dose is in the upper range.
Special dosage recommendation:
Tonsillitis: 50 mg/kg/day in two divided doses.
Acute otitis media: In areas with high prevalence of pneumococci with reduced susceptibility to penicillins, dosage regimens should be guided by national/local recommendations.
Prophylaxis for endocarditis: 50 mg amoxicillin/kg body weight given as a single dose one hour preceding the surgical procedure.

Dosage in impaired renal function:
The dose should be reduced in patients with severe renal function impairment.
In patients with a creatinine clearance of less than 30 ml/min an increase in the dosage interval and a reduction in the total daily dose is recommended.
Glomerular filtration rate >30ml/min: No adjustment necessary.
Glomerular filtration rate 10-30ml/min: Amoxicillin max. 500mg bid.
Glomerular filtration rate <10ml/min: Amoxicillin max. 500mg/day.

Creatinine clearance - ml/min	*Dose*	*Interval between administration*
> 30	Usual dose	No adjustment necessary.
10 – 30	Usual dose	12 h (corresponding to 2/3 of the dose).
< 10	Usual dose	24 h (corresponding to 1/3 of the dose).

Direction for reconstitution:
Add boiled & cooled water up to the mark and shake vigorously to mix the medicine properly. This makes 100 ml of constituted suspension which should be used within 7 days.
Side effects:
The most common adverse reactions is diarrhea, rash, vomiting, and nausea.
Infections and Infestations: Mucocutaneous candidiasis.
Gastrointestinal: Black hairy tongue, and hemorrhagic/pseudomembranous colitis. Onset of pseudomembranous colitis symptoms may occur during or after antibacterial treatment.
Hypersensitivity Reactions: Anaphylaxis. Serum sickness–like reactions, erythematous maculopapular rashes, erythema multiforme, Stevens-Johnson syndrome, exfoliative dermatitis, toxic epidermal necrolysis, acute generalized exanthematous pustulosis, hypersensitivity vasculitis, and urticaria have been reported.
Liver: A moderate rise in AST and/or ALT has been noted, but the significance of this finding is unknown. Hepatic dysfunction including cholestatic jaundice, hepatic cholestasis and acute cytolytic hepatitis have been reported.
Renal: Crystalluria has been reported.
Hemic and Lymphatic Systems: Anemia, including hemolytic anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been reported. These reactions are usually reversible on discontinuation of therapy and are believed to be hypersensitivity phenomena.
Central Nervous System: Reversible hyperactivity, agitation, anxiety, insomnia, confusion, convulsions, behavioral changes, and/or dizziness have been reported.
Miscellaneous: Tooth discoloration (brown, yellow, or gray staining) has been reported. Most reports occurred in pediatric patients. Discoloration was reduced or eliminated with brushing or dental cleaning in most cases.
Overdose:
Symptoms: gross overdosage will produce very high urinary concentrations, particularly after parenteral administration. Problems are unlikely if adequate fluid intake and urinary output are maintained but crystalluria is a possibility.
Treatment: is symptomatic. More specific measures may be necessary in patients with impaired renal function. Amokvart is removed by haemodialysis.
Drug interaction:
Amoxicillin may decrease the effectiveness of contraceptives for oral administration. With the simultaneous use of Amoxicillin with bactericidal antibiotics (including aminoglycosides, cephalosporins, cycloserine, vancomycin, rifampicin) appears synergies; with bacteriostatic antibiotic (including macrolides, chloramphenicol, lincosamides, tetracyclines, sulphonamide) - antagonism. Amoxicillin increases the effects of indirect anticoagulants inhibiting intestinal microflora, reduces the synthesis of vitamin K and prothrombin index. Amoxicillin reduces the effect of drugs, in the process of metabolism that produce PABA. Probenecid, diuretics, allopurinol, phenylbutazone, NSAIDs decrease the tubular secretion of amoxicillin, which can be accompanied by an increase in its concentration in blood plasma. Antacids, glucosamine, laxatives, aminoglycosides, slow down and reduce, and ascorbic acid increases the absorption of amoxicillin. With the combined use of amoxicillin and clavulanic acid pharmacokinetics of both components unchanged.
Cautions:
Amokvart should be given with caution to patients with a history of allergy, especially to drugs. Desensitisation may be necessary if treatment is essential.
Should not be used in patients with underlying defects of the urinary tract or for long-term treatment of recurrent urinary tract infection, as resistance may develop in the enteric flora.
Care is necessary if very high doses of amoxicillin are given, especially if renal function is poor, because of the risk of nephrotoxicity.
Renal and haematological status should be monitored during prolonged and high-dose therapy.
Care is required when treating some patients with syphilis because of the Jarisch-Herxheimer reaction.
Contact with amoxicillin should be avoided since skin sensitisation may occur.
Amokvart should preferably not be given to patients with undiagnosed pharyngitis (who may have mononucleosis) or patients with lymphatic leukaemia or possibly HIV infection who may also be at increased risk of developing skin rashes with amoxicillin.
Presentation:
Amokvart 125 or 250 mg: 1x1, 100ml, Amber Color, Glass Bottle mark level on it in a monocarton with instruction for use.
Storage:
Keep in dry place protected from light at a temperature below 30°C. Keep out of reach of children.
Shelf life:
Labeled. Do not use after expiry date.
Distribution Condition:
Prescribed medicine.