

1. NAME OF THE MEDICINAL PRODUCT:

JAWACLOX-500 INJECTION (Ampicillin Sodium and Cloxacillin Sodium for Injection 500 mg)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

QUALITATIVE DECLARATION

Ampicillin Sodium BP

Equivalent to Ampicillin 250 mg

Cloxacillin Sodium BP

Equivalent to Cloxacillin 250mg

Reconstituted Solution

Sterilised Water for Injections BP, 5 ml

QUANTITATIVE DECLARATION

Each combipack contains:

A. Each Vial

Contains:

Ampicillin

Sodium BP

Equivalent to Ampicillin 250 mg

Cloxacillin Sodium BP

Equivalent to Cloxacillin 250 mg

B. One Ampule of Sterilized water for Injections BP 5 ml

3. PHARMACEUTICAL FORM

Powder for Injection

4. CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

Infections caused by susceptible organisms where a mixed infection is present and includes penicillin-resistant staphylococci.

Examples of such infections include: Respiratory tract infections, Urinary tract infections, Skin and Soft tissue infections, Bone & Joint infections, ENT infections, Gastro-intestinal infections, Surgical & Gynecological Pre-operative

prophylaxis.

The use of this antibiotic may lead to the appearance of resistant strains of organisms and sensitivity testing should, therefore, be carried out wherever possible, to ensure the appropriateness of the therapy.

4.2 POSOLOGY AND METHOD OF ADMINISTRATION

The average adult dose for JAWACLOX is 2 –4g per day. In severe infections, dosages may be safely increased.

PARENTERAL:

Adults and children over 10: 500 mg –1 g intravenously or intramuscularly every 4 – 6 hours or as dictated by the severity of the infection.

Children 2 –10 years*: Half the adult dose (250mg – 500mg).

Children up to 2 years*: Quarter the adult dose (125mg – 250mg). Neonates*: 75 mg every 8hours.

* These dosages should correspond to a daily dosage of 50 –150 mg/kg.

Note: Patients with renal insufficiency may require a reduced dosage.

DIRECTIONS FOR USE:

Intramuscular injection:

500 mg vial - add 1,5 mL of Water for Injections B.P. and shake vigorously.

Intravenous injection:

Normally given by slow intravenous injection.

500 mg vial – dissolve in 10 mL of Water for Injections B.P. by first dissolving the contents of the vial in approximately 3 mL of the Water for Injections B.P. and then withdrawing the dissolved contents into a 10 mL syringe containing the remaining Water for Injections B.P.

Intravenous infusion:

Vial contents should be dissolved in a suitable volume of fluid and given as a rapid intravenous infusion over 30 minutes or suitably diluted into the drip tubing. Solutions must be used within 30 minutes of preparation.

4.3 CONTRAINDICATIONS

JAWACLOX is contraindicated in patients with known Hypersensitivity to

Penicillins or Cephalosporins. Cases of cross sensitivity have been reported. It is also contraindicated in babies born of hypersensitive mothers in the neonatal period.

JAWACLOX should not be administered as sub-conjunctival injection or used as an eye drop as it contains Cloxacillin.

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

When administered to a patient with penicillin allergy anaphylactic shock may occur. Adrenaline, corticosteroids and antihistamines should be used to treat anaphylaxis. Use with caution in patients with a known history of allergy.

Because of the variability in intestinal absorption of Cloxacillin containing products, oral administration is not a suitable substitute for the parenteral route in treatment of severe infections.

4.5 INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION

Avoid its co-administration with Allopurinol and Amino acids.

JAWACLOX 500 is antagonistic towards Chloramphenicol, Erythromycin and Tetracycline.

4.6 PREGNANCY AND LACTATION PREGNANCY:

In pregnant women, give the drug only in absolute necessity. Caution should be applied in lactating mothers.

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

Not Applicable.

4.8 UNDESIRABLE EFFECTS

JAWACLOX may produce diarrhoea, nausea and heartburn. Allergic reactions which may include exfoliative dermatitis, other skin rashes, interstitial nephritis and vasculitis may occur. In this event, withdrawal of JAWACLOX and administration of an antihistamine will suffice in most cases. Should a serious anaphylactic reaction occur. JAWACLOX should be discontinued and the patient treated with the usual agents (adrenalin, corticosteroids or antihistamines).

A generalized sensitivity reaction with urticaria, fever, joint pains and eosinophilia can develop within a few hours to several weeks after starting treatment.

Superinfections by resistant species, such as *Pseudomonas* or *Candida*, which do not respond to penicillin therapy may occur.

A sore mouth or tongue and a black hairy tongue have been reported. Increase in liver enzyme values have been reported.

Care should be taken when high doses are given to patients with renal impairment (because of the risk of neurotoxicity) or congestive heart failure. Renal and haematological systems should be monitored during prolonged and high dose therapy.

Care should be taken when treating patients with syphilis, as the Jarisch-Herxheimer reaction may occur shortly after starting treatment. This reaction, manifesting as fever, chills, headache and reactions at the site of the lesion, can be dangerous in cardiovascular syphilis or where there is a serious risk of increased local damage such as with optic atrophy.

Haemolytic anaemia and leucopenia, prolongation of bleeding time and defective platelet function have been observed usually following high intravenous doses. Convulsions and other signs of toxicity to the CNS may occur particularly with intravenous administration or in patients with renal failure.

Intrathecal administration of penicillins is not recommended, because it is a potent convulsant when given by this route.

JAWACLOX contains ampicillin and should preferably not be given to patients with infectious mononucleosis, lymphatic leukaemia and patients receiving allopurinol treatment because of an increased risk of developing skin rashes.

JAWACLOX may decrease the efficacy of oestrogen-containing oral contraceptives. JAWACLOX contains cloxacillin sodium, therefore disturbances of blood electrolytes may follow the administration of large doses.

4.9 OVERDOSE

In overdose, the symptoms of nausea, vomiting and diarrhoea can occur.

5. PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

JAWACLOX 500 is an antibiotic combination composed of two synthetic penicillins, Ampicillin sodium and Cloxacillin sodium.

JAWACLOX exhibits *in vivo* and *in vitro* bactericidal activity against Gram-positive and Gram-negative organisms.

Ampicillin Sodium is recommended in infections due to Gram positive bacteria resistant to crystalline Penicillin. Ampicillin exerts bactericidal action on both Gram-positive and Gram-negative organisms. Its spectrum includes Gram-positive organisms e.g. *S. pneumoniae* and other Streptococci, *L. monocytogenes* and Gram-negative bacteria e.g. *M. catarrhalis*, *N. gonorrhoeae*, *N. meningitidis*, *E. coli*, *P. mirabilis*, Salmonella, Shigella, and *H. influenzae*. Ampicillin exerts its action by inhibiting the synthesis of bacterial cell wall.

Cloxacillin is a Penicillinase-resistant penicillin. It is active against Gram-positive organisms including Penicillinase-producing strains of Staphylococci. Cloxacillin Sodium is efficacious against infections caused by Staphylococci, including Penicillinase producing strains. Cloxacillin is highly active against *Staph aureus*, *S. pyogenes*, *S. viridans* and *S. pneumoniae*. It is also active against Penicillinase-producing Gonococci and against *N. meningitidis* and *H. influenzae*. Other Gram-negative organisms are resistant to Cloxacillin as are also methicillin-resistant strains of Staphylococci.

Therefore JAWACLOX 500 has a broad spectrum bactericidal activity and is therefore used in most common infections of bacterial origin.

5.2 PHARMACOKINETIC PROPERTIES

Ampicillin is well-absorbed from the GI tract (though food reduces its absorption), and reaches peak concentrations in one to two hours. The bioavailability is around 62% for parenteral routes. Unlike other penicillins, which usually have bind 60–90% to plasma proteins, ampicillin binds to only 15–20%.

Ampicillin is distributed through most tissues, though it is concentrated in the liver and kidneys. It can also be found in the cerebrospinal fluid when the meninges become inflamed (such as, for example, meningitis). Some ampicillin is metabolized by hydrolyzing the beta-lactam ring to penicilloic acid, though most of it is excreted unchanged. In the kidneys, it is filtered out mostly by tubular secretion; some also undergoes glomerular filtration, and the rest is excreted in the

feces and bile.

Cloxacillin Absorbed rapidly but incompletely (37% to 60%) from the GI tract; it's relatively acid stable. Food may decrease both rate and extent of absorption.

Cloxacillin Distributed widely. CSF penetration is poor but enhanced in meningeal inflammation. Cloxacillin crosses the placental barrier and is 90% to 96% protein-bound.

Metabolism: Only partially metabolized.

Excretion: Excreted in urine by renal tubular secretion and glomerular filtration; also appears in breast milk. Elimination half-life in adults is 1/2 to 1 hour, extended to 2 1/2 hours in patients with renal impairment.

6. PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

None

6.2 INCOMPATIBILITIES

JAWACLOX should not be added to infusion bottles containing Dextran 40 injection in 5% dextrose, but may be injected into the drip tubing of such an infusion. Cloxacillin has been reported to be incompatible with aminoglycosides, tetracyclines, and other antimicrobial agents including erythromycin and polymyxin B sulphate.

JAWACLOX Injection should not be mixed with blood products or other proteinaceous fluids.

6.3 SHELF LIFE

36 Months

6.4 SPECIAL PRECAUTIONS FOR STORAGE

Store below 30°C in a dry place. Protect from light.

KEEP OUT OF REACH OF CHILDREN

6.5 NATURE AND CONTENTS OF CONTAINER

5 ml Plain Glass vial (USP Type- I) in a carton with insert.

6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

Not Applicable

7. <APPLICANT/MANUFACTURER>

APPLICANT:

JAWA INTERNATIONAL LTD.

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E-mail: contactus@jawasil.com

MANUFACTURER:

SWISS PARENTERALS LIMITED,

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