SUMMARY OF PRODUCT CHARACTERISTICS

1. Name of the medicinal product

TUCLOX DRY SUSPENSION
(Ampicillin 60 mg + Cloxacillin 30 mg powder for oral suspension)

2. Qualitative and quantitative composition

Each 0.6 mL after reconstitution contains 60 mg ampicillin as Ampicillin Trihydrate and 30 mg cloxacillin as Cloxacillin Sodium.

3. Pharmaceutical form

Powder for oral suspension.

A white granular powder that gives an orange syrup on reconstitution with water.

4. Clinical particulars

4.1 Therapeutic indications

Tuclox is indicated for the treatment of the following infections including mixed Gram-positive (except methicillin-resistant Staphylococcus aureus (MRSA) and methicillin-resistant coagulase-negative staphylococcus (MRCoNS)) and Gram-negative infections:

Surgery: post-operative wound infections, postoperative pulmonary infections.

Respiratory infections: bronchopneumonia, acute exacerbations of chronic bronchitis.

Obstetrics: puerperal fever.

Other infections such as septicaemia, bone infections e.g., osteomyelitis, and ear, nose and throat infections.

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to Tuclox. Where treatment is initiated before results are available expert advice should be sought when the local prevalence of resistance is such that the utility of AMPICLOX is questionable.

Tuclox neonatal oral drops are indicated for the prophylaxis or treatment of bacterial infections in premature babies or neonates, caused by known susceptible strains of bacteria.

4.2 Posology and method of administration the dosage for Tuclox n suspension depends on the severity of the infection, the age of the patient and renal function. The dose should be reduced in severe renal failure. Tuclox suspension is administered orally. Orally administered Tuclox suspension should be given at least 30 minutes before meals to facilitate absorption. Tuclox preparations may be given with other antibiotics such as aminoglycosides to produce a wider spectrum of antimicrobial activity. The usual dosage regimen for Tuclox suspension is as follows:

Adults and Children over 12 years: 500mg to 1gm every 6 hours
Children 2 - 12 years: 250 -500 mg (5ml to 10ml) every 6 hours of the reconstituted suspension every 6 hours.

Neonates to 2 years: 0.6ml (90 mg) of reconstituted suspension every 4 hours
Note: Best results are obtained if dosages are administered half to one hour before meals or at least two hours after meals

4.3Contraindications
Known allergy to penicillin or cephalosporins. Cases of cross-sensitivity have been reported.
Babies born of hypersensitive mothers in the neonatal period.
The oral dosage forms are not recommended for chronic, severe, or deep-seated infections such as subacute bacterial endocarditis, meningitis or syphilis.

4.4 Special warnings and precautions for use

Older patients and those receiving treatment for more than 2 weeks are at a greater risk of developing hepatitis and cholestatic jaundice. 2. Use of products containing isoxazolyl penicillins like Tuclox has in rare cases been associated with agranulocytosis and neutropenia. It is therefore important to monitor both renal and haematological status during prolonged treatment. 3. Administration of Tuclox is contraindicated in patients known to be hypersensitive to Ampicillin and Cloxacillin or any component of Tuclox or other penicillins. 4. Penicillins should be given with caution to patients with a history of allergy, especially to drugs. 5. Axylin should not be administered to patients with infectious mononucleosis, lymphatic leukaemia, or HIV infection as they are especially susceptible to Ampicillin induced skin rashes. 6. It should be borne in mind that patients who are hypersensitive to any of the penicillins may also react to cephalosporins and other beta-lactam compounds. 7. Treatment with Tuclox should be discontinued if skin rashes develop during the course. If treatment with Tuclox is essential in hypersensitive patients, then it will be necessary to carry out a desensitization procedure.

4.5 Interaction with other medicinal products and other forms of interaction Probenecid decreases the renal tubular excretion of Tuclox. Concurrent use with Tuclox may result in increased and prolonged blood levels of Tuclox As with other antibiotics, Tuclox may affect the gut flora, leading to lower oestrogen reabsorption and reduced efficacy of combined oral

contraceptives.
Sulphonamides and acetylsalicylic acid inhibit serum protein binding of cloxacillin in vitro. This may result in increased levels of free cloxacillin in serum in vivo. Bacteriostatic drugs may interfere with the bactericidal action of Tuclox. Concurrent administration of allopurinol during treatment with Tuclox can increase the likelihood of allergic skin reactions.

4.6 Fertility, pregnancy and lactation

Pregnancy: Animal studies with ampicillin/ cloxacillin have shown no teratogenic effects. The product has been in extensive clinical use since 1961 and its use in human pregnancy has been well documented in clinical studies. When antibiotic therapy is required during pregnancy, ampicillin/ cloxacillin may be considered appropriate.
Lactation: During lactation, trace quantities of penicillins can be detected in breast milk. Adequate human and animal data on the use of ampicillin/ Cloxacillin during lactation are not available.

4.7 Effects on the ability to drive and use machines

Ampicillin has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Hypersensitivity reactions: If any hypersensitivity reaction occurs, the treatment should be discontinued. Skin rash, pruritus and urticaria have been reported occasionally. The incidence is higher in patients suffering from infectious mononucleosis and acute or chronic leukaemia of lymphoid origin. Purpura has also been reported. Rarely, skin reactions such as erythema multiforme and Stevens-Johnson syndrome, and toxic epidermal necrolysis have been reported.

Reporting of suspected adverse reactions Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/ risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the TMDA ADR reporting tool; website: https://imis.tmda.go.tz/ arrt or search for TMDA Adverse Reactions Reporting Tool in the Google Play Store";

4.9 Overdose

Gastrointestinal effects such as nausea, vomiting and diarrhoea may be evident and should be treated symptomatically. Axylin may be removed from the circulation by haemodialysis.

5. Pharmacological properties

5.1 Clinical Pharmacology

Ampicillin is a beta-lactam antibiotic and has a bactericidal action against Gram-positive bacteria, Gram-negative cocci, some other Gram-negative bacteria, spirochaetes, and

actinomycetes. It exerts its killing action on growing and dividing bacteria by inhibiting bacterial cell wall synthesis. Bacterial cell walls are held rigid and protected against osmotic rupture by peptidoglycan. It inhibits the final cross-linking stage of peptidoglycan production by binding to and inactivating transpeptidases, penicillin-binding proteins on the inner surface of the bacterial cell membrane. Cloxacillin is a beta-lactam antibiotic with a bactericidal mode of action similar to that of benzylpenicillin but is resistant to staphylococcal penicillinase. It is active against penicillinase-producing and non-penicillinase-producing staphylococci. There is synergy between ampicillin and cloxacillin against beta-lactamase-producing organisms and penicillinase-stable antibiotics. This gives a broader spectrum of action.

5.2 Pharmacokinetic properties

Both Ampicillin and Cloxacillin are relatively stable in the acid gastric secretion and are moderately well absorbed from the gastrointestinal tract after oral administration. Either component of the combination of Ampicillin and cloxacillin interferes with the absorption or excretion of the other. Food can interfere with the absorption of Ampicillin so doses should preferably be taken at least 30 minutes before meals. Peak plasma concentrations in plasma are obtained in about 1 to 2 hours and following a dose of 500mg by mouth are reported to range from 2 to 6mg per mL. Ampicillin is widely distributed and therapeutic concentrations can be
achieved in ascitic, pleural, and joint fluids. It crosses the placenta into foetal circulation and small amounts are excreted into breast milk. About 20% is bound to plasma proteins and the plasma half-life is 1 to 1.5 hours, but this may be increased in neonates; in renal failure half- lives of 7 to 20 hours have been reported.

5.3 Preclinical safety data

Not applicable

6. Pharmaceutical particulars

6.1 List of excipients

Sodium benzoate powder Sodium citrate Sodium saccharin Disodium edetate Sodium CMC Xanthan gum Aspartame Colloidal silicon dioxide Vanilla flavour powder Magnesium stearate Sunset orange colour Strawberry flavour Menthol Isopropyl alcohol.

6.2 Incompatibilities

Cloxacillin has been reported to be incompatible with aminoglycosides, tetracyclines, and other antimicrobial agents including erythromycin and polymyxin B sulphate. Should not be mixed with blood products or other proteinaceous fluids.

6.3 Shelf life 36 months

6.4 Special precautions for storage Store in a dry place below 30°C. Protect from light. Replace the cap tightly after use.

6.5 Nature and contents of container 12ml Amber PET bottles. The bottle is contained in a unit carton with a literature insert and a 1ml measuitng dropper

6.6 Special precautions for disposal and other handling No special instructions

7. MARKETING AUTHORISATION HOLDER

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