

Summary of Product Characteristics

1. NAME OF THE MEDICINAL PRODUCT

DYZOL DS

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Diloxanide furoate BP 500 mg and

Metronidazole 400 mg BP 400 mg

For full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Film-Coated Tablet

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

DYZOL DS is indicated for the treatment of Giardiasis, acute amoebiasis, chronic amoebiasis, hepatic amoebiasis and other systemic diseases due to *E. histolytica*

4.2 Posology and method of administration

Posology

Children 1-5 years; 5ml three times daily for 5 days

Children 5 to 12 years; 5-10 ml three times daily for 5 days

Adults and children above 12 years; 10-20ml three times daily for 5 days

Method of administration

For oral administration only.

Always shake the bottle before use.

DYZOL DS tablet should be taken with or after meals.

Complete the full course of this medicine.

4.3 Contraindications

Known hypersensitivity to Metronidazole, nitroimidazoles ,diloxanide furoate and/or any of the excipients.

4.4 Special warnings and precautions for use

In patients undergoing haemodialysis, metronidazole and metabolites are efficiently removed during an eight-hour period of dialysis. Metronidazole should therefore, be re-administered immediately after haemodialysis.

Metronidazole should be administered with caution to patients with hepatic encephalopathy. The daily dosage may be reduced to one third and may be administered once daily.

Patients should be warned that metronidazole may darken urine.

Cases of severe bullous skin reactions such as Stevens Johnson syndrome (SJS), toxic epidermal necrolysis (TEN) or acute generalized exanthematous pustulosis (AGEP) have been reported with metronidazole. If symptoms or signs of SJS, TEN or AGEP are present, treatment with metronidazole must be immediately discontinued.

Metronidazole is mainly metabolized by hepatic oxidation. Substantial impairment of metronidazole clearance may occur in the presence of advanced hepatic insufficiency.

4.5 Interaction with other medicinal products and other forms of interaction

Metronidazole inhibits the metabolism of concurrently administered phenytoin i.e the plasma concentration of phenytoin is increased whereas the efficacy of metronidazole is reduced when phenytoin is administered concurrently. It also increases the plasma concentrations of Tacrolimus, Lithium, cyclosporine and coumarin derivatives.

Increased serum carbamazepine levels and toxicity have been seen in patients given concomitant metronidazole.

Patients receiving phenobarbital or phenytoin metabolise metronidazole at a much greater rate than normally, reducing the half- life to approximately three hours.

Patients should be advised not to take alcohol during metronidazole therapy and for at least 48 hours afterwards because of the possibility of a disulfiram-like reaction.

4.6 Pregnancy and lactation

This product should not be used in lactating mothers. There is inadequate evidence of the safety of metronidazole in pregnancy hence DYZOL DS should not be given during pregnancy or during lactation unless the physician considers it essential, in these circumstances short, high dosage regimes are not recommended.

4.7 Overdose

Diloxanide furoate severe overdosage, early gastric lavage is recommended. There is no specific antidote. Treatment should be symptomatic and supportive.

Single oral doses of metronidazole, up to 12g have been reported in suicide attempts and accidental overdoses. Symptoms were limited to vomiting, ataxia and slight disorientation. There is no specific antidote for metronidazole overdose. In cases of suspected massive overdose, symptomatic and supportive treatment should be instituted.

4.8 Effects on the ability to drive and use machines

Patients should be warned about the potential for drowsiness, dizziness, confusion, hallucinations, convulsions or transient visual disorders, and advised not to drive or operate machinery if these symptoms occur.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorization of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Reporting of suspected adverse reactions: Healthcare professionals are requested to report any suspected adverse reactions via pharmacy and poisons board, Pharmacovigilance Electronic Reporting System (PvERS) <https://pv.pharmacyboardkenya.org>

4.9 Undesirable effects

The frequency of adverse events listed below is defined using the following convention:

very common ($\geq 1/10$); common ($\geq 1/100$ to $< 1/10$); uncommon ($\geq 1/1,000$ to $< 1/100$); rare ($\geq 1/10,000$ to $< 1/1,000$); very rare ($< 1/10,000$), not known (cannot be estimated from the available data).

Frequency, type and severity of adverse reactions in children are the same as in adults.

Serious adverse reactions occur very rarely with standard recommended regimens.

Very Rare: convulsions, feeling confused, Hallucinations, temporary effects on your eyesight, such as difficulty in focusing, drowsiness and dizziness, clumsiness or poor co-ordination, pain and swelling of your skin, skin rashes, headache, darkening of your urine, pains in your joints or muscles, liver problems including life-threatening liver failure (hepatocellular liver injury).

Frequency not known: numbness, tingling, pain or feeling weak in your arms and legs, unpleasant taste in your mouth, abdominal discomforts, diarrhea, loss of appetite, fever, optic neuritis, hearing impairment/ hearing loss, ringing in the ears (tinnitus), skin rash or skin discoloration with or without raised areas which often reoccurs at the same location each time the drug is taken.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Diloxanide furoate a dichloroacetamide derivative is a luminal amoebicide acting principally on the lumen of the bowel. Diloxanide furoate destroys trophozoites of *E. histolytica* and prevents amoebic cyst formation

The nitro group of metronidazole acts as electron acceptor and is thus reduced to a chemically reactive drug form which produces biochemical lesions in the cells with destruction of the DNA helical structure thus inhibiting synthesis.

5.2 Pharmacokinetic properties

Metronidazole is readily absorbed from the gastro-intestinal tract and is widely distributed in body tissue. About 10% is bound to plasma proteins with a plasma half-life of about 8-10 hours. It penetrates well into body tissues and fluids and therapeutic concentrations are also achieved in cerebrospinal fluid. The liver is the main site of metabolism through side chain oxidation. Unchanged metronidazole and metabolites are excreted in urine. Diloxanide furoate is hydrolysed in the gastrointestinal tract resulting into diloxanide which is then readily absorbed. Diloxanide furoate is slowly absorbed from the gastrointestinal tract hence provides adequate concentration of the medication in the intestinal lumen for a long duration however diloxanide is rapidly absorbed with a bioavailability of approx. 90%. The absorbed diloxanide is extensively conjugated with glucuronic acid the conjugate being inactive which is excreted mainly in urine; less than 10% is eliminated in faeces.

6. PHARMACEUTICAL PARTICULARS

6.1 List of Excipients

- Maize starch
- Sodium methyl hydroxybenzoate
- Sodium propyl hydroxybenzoate
- Purified water
- Colloidal anhydrous silica
- Magnesium stearate
- Sodium starch glycolate (type A)
- Hypromellose 15 CPS
- Titanium dioxide
- Purified talc
- Macrogol -400
- Sodium lauryl sulfate
- Indigo carmine
- Isopropyl alcohol
- dichloromethane

6.2 Incompatibilities

Not applicable

6.3 Shelf life

3 years

6.4 Special precautions for storage

Store in a cool dry place below 30°C away from direct sunlight.

6.5 Nature and contents of container

Alu-Alu blister of 15 tablets. Such that 1 blister to be packed in a carton along with a pack insert.

6.6 Special precautions for disposal

Oxytocin is compatible with the following infusion fluids: sodium chloride 0.9 %, dextrose 5 %, Ringer's solution, acetated Ringer's solution.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Twokay Chemicals Ltd.

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8. MARKETING AUTHORISATION NUMBER(S)

CTD9118

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

20/02/2022

10. DATE OF REVISION OF THE TEXT

20/02/2022