## **1.3.1** Summary of Product Characteristics (SmPC)

## 1. PRODUCT INFORMATION FOR HEALTH PROFESSIONALS

#### 1. NAME OF MEDICINAL PRODUCT

LOXAGYL Suspension (Metronidazole)

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION:

Loxagyl Suspension contains metronidazole 200mg / 5 ml

#### **3. PHARMACOLOGICAL FORM:**

**Oral Suspension** 

#### 4. CLINICAL PARTICULARS:

#### 4.1 THERAPEUTIC INDICATIONS:

Loxagyl suspension is particularly recommended for children and adults who have difficulty in swallowing Loxagyl tablets. Loxagyl suspension is administered orally. Loxagyl is indicated in the treatment of all forms;

#### Amoebiasis

- (a) Invasive intestinal disease in susceptible subjects.
- (b) Intestinal disease in less susceptible subjects and chronic amoebic hepatitis
- (c) Symptomless cyst passers

#### **Uro-genital Trichomoniasis**

Where re-infection is likely, the consort should receive a similar course of treatment concurrently.

#### Giardiasis

A second course of treatment may be necessary for some patients two weeks after the end of the first course.

#### Acute ulcerative gingivitis

#### **Bacterial Viginosis**

## 4.2 DOSAGE AND ADMINISTRATION:

	Duration of	ADULTS and	CHILDREN		
INDICATIONS	Dosage in Days	CHILDREN Over 10 years unless grossly underweight	7 – 10 years	3 to 7 years	1 to 3 years
Amoebiasis		20 ml or	10 ml or	5 ml or 1 (200	5 ml or 1 (200
(a) Invasive intestinal	5	4 (200 mg)	2 (200 mg) or	mg) or 1/2 (400	mg) or 1/2 (400
disease in susceptible		2 (400 mg) three		mg) four times	mg) three times
sujects		times daily		daily	daily

			1 (400 mg) three times daily				
(b) Intestinal disease in less susceptible subjects and chronic amoebic hepatitis	5-10	10 ml or 2 (200 mg) or 1 (400 mg) three times daily	5 ml or 1 (200 mg) or ½ (400 mg) three times daily	2.5 ml or ½ (200 mg) or ¼ (400 mg) four times daily	2.5 ml or ½ (200 mg) or ¼ (400 mg) four times daily		
(c)Symptomless cyst passers	5	10 ml – 20 ml or 2-4 (200 mg) or 1-2 (400 mg) three times daily	5ml – 10 ml or 1-2 (200 mg) or <sup>1</sup> ⁄2 -1 (400 mg) three times daily	2.5 ml – 5 ml or 1/2 - 1 (200 mg) or 1/2 - 1/4 (400 mg) three times daily	2.5 ml – 5 ml or <sup>1</sup> / <sub>2</sub> - 1 (200 mg) or <sup>1</sup> / <sub>2</sub> - 1/4 (400 mg) three times daily		
Uro-genital Trichomoniasis Where re-infection is likely, the consort should receive a similar course of treatment		5 ml or 1 (200 mg) or ½ (400 mg) three times daily	2.5 ml or ½ (200 mg) or ¼ (400 mg) three times daily	2.5 ml or ½ (200 mg) or ¼ (400 mg) two times daily	1.25 ml or <sup>1</sup> / <sub>4</sub> (200 mg) or 1/8 (400 mg) four times daily		
concurrently.	7						
	or 2	20 ml or 4 (200 mg) 2 (400 mg) in the morning, 30 ml or 6 (200					
		mg) or 3 (400 mg) in the					
<b>Giardiasis</b> A second course of treatment may be necessary for some patients two weeks after the end of the first course.	3	evening 50 ml or 10 (200 mg) or 5 (400 mg) once daily	25 ml or 5 (200 mg) or 2 <sup>1</sup> / <sub>2</sub> (400 mg) once daily	15 ml or 3 (200 mg) or 1 <sup>1</sup> / <sub>2</sub> (400 mg) once daily	10 ml or 2 (200 mg) or 1 (400 mg) once daily		
Acute ulcerative	3	5 ml or 1 (200	2.5 ml or ½	2.5 ml or <sup>1</sup> / <sub>2</sub>	1.25 ml or ¼ (200		
gingivitis		mg) or ½ (400 mg) three times daily	(200 mg) or <sup>1</sup> / <sub>4</sub> (400 mg) three times daily	(200 mg) or <sup>1</sup> / <sub>4</sub> (400 mg) twice times daily	mg) or 1/8 (400 mg) once daily		
Bacterial Viginosis		As for Trichomoniasis					
	Immature children and babies weighing less than 11.34 kg should receive						
	proportionately smaller dosage, as advised by the physician.						

For Loxagyl Suspension, Shake the bottle before use

## 4.3 CONTRA-INDICATION:

Loxagyl is contraindicated in patients with a prior history of hypersensitivity to metronidazole or other nitroimidazole derivatives.

# 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Convulsive Seizures and Peripheral Neuropathy: The latter characterized mainly by numbress or paresthesia of an extremity, have been reported in patients treated with metronidazole. The appearance of abnormal neurologic signs demands the prompt discontinuation of Loxagyl therapy. Loxagyl should be administered with caution to patients with central nervous system diseases.

Regular clinical and laboratory monitoring (especially leucocyte count) are advised if administration of Metronidazole for more than 10 days is considered to be necessary and patients should be monitored for adverse reactions such as peripheral or central neuropathy (such as paraesthesia, ataxia, dizziness, convulsive seizures).

There is the possibility that after Trichomonas vaginalis has been eliminated a gonococcal infection might persist.

The elimination half-life of metronidazole remains unchanged in the presence of renal failure. The dosage of metronidazole therefore needs no reduction. Such patients however, retain the metabolites of metronidazole. The clinical significance of this is not known at present.

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.

No routine adjustment in the dosage of Metronidazole need be made in patients with renal failure undergoing intermittent peritoneal dialysis (IPD) or continuous ambulatory peritoneal dialysis (CAPD).

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

Significant cumulation may occur in patients with hepatic encephalopathy and the resulting high plasma concentrations of metronidazole may contribute to the symptoms of encephalopathy.

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.

Metronidazole should be used with caution in patients with active or chronic severe peripheral and central nervous system disease due to the risk of neurological aggravation.

Methyl, ethyl and propyl hydroxybenzoates are contained in this product which may cause allergic reactions (possibly delayed).

# 4.5 DRUG INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION

As with many other drugs, alcohol should be avoided during treatment with Loxagyl. Rare instances of slight and transient fall in blood pressure have been reported, it may therefore be advisable to lower the dosage of any anti-hypertensive drug which may be given concurrently.

Psychotic reactions have been reported in patients who were using metronidazole and disulfiram concurrently.

Some potentiation of anticoagulant therapy has been reported when metronidazole has been used with the warfarin type oral anti-coagulants. Dosage of the anticoagulant may require reducing. Prothrombin time should be monitored. No interactions have been reported of the heparin type.

Lithium retention accompanied by evidence of possible renal damage has been reported in patients treated simultaneously with lithium and metronidazole. Lithium treatment should be tapered or withdrawn before administering metronidazole. Plasma concentration of lithium, creatinine and electrolytes should be monitored in patients under treatment with lithium while they receive metronidazole.

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

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

Aspartate amino transferase assays may give spuriously low values in patients taking metronidazole, depending on the method used.

Clinicians who contemplate continuous therapy for the relief of chronic conditions, for periods no longer than those recommended, are advised to consider the possible therapeutic benefit against the risk of peripheral neuropathy.

Metronidazole reduces the clearance of 5-fluorouracil and can therefore result in increased toxicity of 5-fluorouracil.

Patients receiving cyclosporin or tacrolimus with metronidazole are at risk of elevated cyclosporin / tacrolimus serum levels. Serum cyclosporin / tacrolimus and serum creatinine should be closely monitored when co-administration is necessary.

Plasma levels of busulfan may be increased by metronidazole which may lead to severe busulfan toxicity.

## 4.6 **PREGNANCY AND LACTATION:**

Pregnant women tolerate metronidazole well and no adverse effect on their offspring. Loxagyl can thus be given during the first three months of pregnancy and during lactation where the physician considers it essential; in these circumstances, the short high dosage regimens are not recommended.

## 4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

No studies of the effect of Loxagyl suspension on the ability to drive and use machines have been performed

## 4.8 SIDE EFFECTS / ADVERSE EFFECTS

There have been occasional reports of an unpleasant taste in the mouth, furred tongue, nausea, vomiting (very rarely) and gastro-intestinal upset. Drowsiness, headache, skin rashes and pruritus have been reported, but rarely.

## 4.9 OVER DOSAGE:

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 over dosage. In cases of suspected massive overdose, symptomatic and supportive treatment should be instituted.

## 5.0 PHARMACOLOGY PROPERTIES:

## 5.1 Pharmacodynamics properties

The selective action of this compound against anaerobes and anoxic and hypoxic cells is due to the mode of action. The nitro group of metronidazole acts as electron acceptor and is thus reduced to a chemically reactive drug form. This produces biochemical lesions in the cells, thus causing death. The major site of action is believed to be DNA, where it causes loss of the helical structure and inhibits synthesis.

## 5.2 Pharmacokinetic properties

It is readily absorbed from the gastro-intestinal tract and widely distributed in body tissues. Half-life in plasma is about 8-10 hours. About 10% is bound to plasma proteins.

It penetrates well into body tissues and fluids, including vaginal secretions, seminal fluid, saliva and breast milk. Therapeutic concentrations are also achieved in cerebrospinal fluid.

Unchanged metronidazole and several metabolites are excreted in the urine, the liver is the main site of metabolism and the major metabolites are as a result of side chain oxidation, forming glucuronides.

## **6 PHARMACEUTICAL PARTICULARS:**

## 6.1 LIST OF EXCIPIENTS:

Sodium Dihydrogen Phosphate Dihydrate Granulated Sugar Ethanol 96% Veegum HV Benzoyl Metronidazole Methyl Hydroxybenzoate Propyl Hydroxybenzoate Lemon Oil Oil of Orange Terpeneless BP Purified Water BP

## 6.2 INCOMPATIBILITIES:

Not applicable

## 6.3 SHELF LIFE

2 years

## 6.4 SPECIAL PRECAUTION FOR STORAGE:

Store below 30°C in cool dry place. Protect from light. Keep out of reach of children

# 6.5 NATURE AND CONTENT OF CONTAINER:

60ml Amber Pet Bottle

# 6.6 SPECIAL PRECAUTION FOR DISPOSAL:

To be destroyed by NAFDAC enforcement unit.

#### 6. Manufacturer

May & Baker Nigeria Plc.

1, May & Baker Avenue off Idiroko Road

Ota

Ogun State.

## 7. Marketing Authorization Holder(s)

Same as Manufacturer

#### 8. Date of revision of the text

7<sup>th</sup> June 2024