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# SCHEDULING STATUS

S1

# 1. NAME OF THE MEDICINE

CETICIT SYRUP 1 mg/1 mL syrup

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 1 ml of CETICIT SYRUP contains:	
Cetirizine dihydrochloride	1 mg
Preservatives:	
Methyl parahydroxybenzoate	0,135 %
Propyl parahydroxybenzoate	0,015 %
Contains: Sorbitol 70 %	2,250 g
Contains: Sweetener (saccharin sodium)	5,0 mg

For the full list of excipients see section 6.1

# 3. PHARMACEUTICAL FORM

# Oral syrup

Clear, or almost clear, colourless solution with the taste and odour of banana.

# 4. CLINICAL PARTICULARS

# 4.1 Therapeutic indications

CETICIT SYRUP is indicated for symptomatic relief of allergic conditions such as hay fever,

allergic rhinitis, and allergic skin conditions associated with pruritus, such as urticaria.

# 4.2 Posology and method of administration

# Posology

# Adults or children 12 years of age or older:

10 mg (10 ml) once daily.

# Children 6 to 12 years old:

10 mg (10 ml) daily, either as a single dose or as divided doses of 5 ml in the morning and 5 ml in the evening.

# Children 2 to 6 years old:

5 mg (5 ml) daily, either as a single dose or as divided doses of 2,5 ml in the morning and 2,5 ml in the evening.

# **Special populations**

# Elderly

No dose adjustment is necessary in healthy elderly patients with normal renal function (see section 4.4 and 5.2).

# Paediatric population

**CETICIT SYRUP** is contraindicated in children under the age of two years, as safety and efficacy have not been demonstrated (see section 4.3).

# Renal impairment

In patients with renal impairment, where the creatinine clearance is less than 40 ml/min, the recommended daily dose of cetirizine should be halved (see section 4.2 & 4.3 & 4.8).

# Hepatic impairment

In moderate to severe hepatic impairment half the recommended daily dose should be used (see section 4.3 & 4.4 & 4.8).

# Pregnancy and lactation

The safety in pregnancy has not been established (see section 4.6).

It is contraindicated in lactating women since the active ingredient is excreted in breast milk.

# Method of administration

Oral administration

# Missed dose

Doctors should advise patients who forget to take **CETICIT SYRUP** to take a dose as soon as possible and then continue with the normal dose. Patients should not take a double dose to compensate for the missed dose.

# 4.3 Contraindications

- Hypersensitivity to cetirizine, hydroxyzine, any piperazine derivatives or to any of the ingredients of CETICIT SYRUP.
- Patients with severe renal impairment at less than 30 mL/min creatinine clearance (see section 4.2 & 4.3 & 4.8).
- Asthma, as it may cause airway obstruction in patients who have previously experienced adverse reactions to antihistamines.

- Pregnancy, as safety has not been established (see section 4.6).
- **CETICIT SYRUP** is contraindicated in individuals who have shown hypersensitivity to cetirizine or any constituent of the product.
- It is contraindicated in lactating women since the active ingredient is excreted in breast milk (see section 4.6)
- Children under the age of two years, as safety and efficacy have not been demonstrated (see section 4.2 & 4.3 & 4.4)

# 4.4 Special warnings and precautions for use

# Refer to "CONTRAINDICATIONS (see section 4.3)

**CETICIT SYRUP** lacks significant sedative effects, however, a small number of individuals may experience sedation, which may lead to drowsiness and impaired concentration. This effect may be aggravated by the simultaneous intake of alcohol or other central nervous system depressant agents (See 'INTERACTIONS'). The patient's ability to perform hazardous activities requiring mental alertness or physical coordination such as driving or operating machinery may be impaired. It is therefore advisable to determine individual response before driving or performing complicated tasks (see section 4.7).

Caution should be taken in patients with predisposition factors of urinary retention (e.g. spinal cord lesion, prostatic hyperplasia) as **CETICIT SYRUP** may increase the risk of urinary retention (see section 4.3 & 4.4).

Caution in epileptic patients and patients at risk of convulsions is recommended.

Allergy skin tests are inhibited by **CETICIT SYRUP**, and a wash-out period (of 3 days) is required before performing them.

The preservatives, methyl parahydroxybenzoate and propyl parahydroxybenzoate as contained in **CETICIT SYRUP** may cause allergic reactions (possibly delayed) (see section 2 & 6.1).

**CETICIT SYRUP** contains sorbitol and may have a laxative effect. Patients with the rare hereditary condition of sorbitol/maltitol/ lactitol intolerance should not take **CETICIT SYRUP** (see section 2 & 6.1).

Pruritus and/or urticaria may occur when **CETICIT SYRUP** is stopped, even if those symptoms were not present before treatment initiation. The symptoms may be intense and may require treatment to be restarted. The symptoms should resolve when the treatment is restarted.

Elderly patients are more susceptible to many of the adverse effects of **CETICIT SYRUP**.

# **Special Populations**

# Elderly patients

No dose adjustment is necessary in healthy elderly patients with normal renal function (see section 4.2 & 4.3)

# Paediatric population

Contra-indicated in children under the age of two years, as safety and efficacy have not been demonstrated (see section 4.3).

# Pregnancy and lactation

The safety in pregnancy has not been established (see section 4.6).

It is contraindicated in lactating women since the active ingredient is excreted in breast milk (see section 4.6).

# Renal impairment

In patients with renal impairment, where the creatinine clearance is less than 40 ml/min, the recommended daily dose of cetirizine should be halved (see section 4.2 & 4.3).

# Hepatic impairment

In moderate to severe hepatic impairment half the recommended daily dose should be used (see section 4.2 & 4.4).

# Porphyria

Use with caution.

# 4.5 Interaction with other medicines and other forms of interaction

Concomitant use of alcohol and other sedating agents should be avoided. There is no evidence of an interaction between cetirizine and cimetidine, ketoconazole, erythromycin, azithromycin, diazepam, glipizide and pseudoephedrine (see section 4.3 & 4.4).

The extent of absorption of cetirizine is not reduced with food, although the rate of absorption is decreased.

# Alcohol and other Central Nervous System (CNS) depressants

In sensitive patients, the concurrent use of alcohol or other CNS depressants may cause additional reductions in alertness and impairment of performance, although cetirizine, as in **CETICIT SYRUP**, does not potentiate the effect of alcohol (see section 4.3 & 4.4).

# 4.6 Fertility, pregnancy and lactation

Safety in pregnancy and lactation has not been established.

(See 'CONTRAINDICATIONS') (see section 4.3 and 4.4).

# Breastfeeding

Caution should be exercised when prescribing **CETICIT SYRUP** to lactating women. Cetirizine is excreted in human breast milk at concentrations representing 25 % to 90 % of those measured in plasma, depending on sampling time after administration.

# Fertility

Limited data is available on human fertility but no safety concern has been identified. Animal data show no safety concern for human reproduction.

# 4.7 Effects on ability to drive and use machines

The patient's ability to perform hazardous activities requiring mental alertness or physical coordination such as driving or operating hazardous machinery may be impaired. It is therefore advisable to determine individual response before driving or performing complicated tasks. This effect may be compounded by the simultaneous intake of alcohol or other central nervous system depressants (see section 4.4).

# 4.8 Undesirable effects

# Tabulated summary of adverse reactions

System Organ Class	Frequency	Side Effects
Blood and	Less frequent	Thrombocytopenia, leucopoenia, haemolytic
lymphatic system		anaemia, agranulocytosis
disorders		
Immune system	Less frequent	Urticaria, skin rash, pruritus, angioedema,
disorders		hypersensitivity reactions, anaphylaxis
Metabolism and	Frequency	Increased appetite
nutrition disorders	unknown	
Psychiatric	Less frequent	Somnolence, depression, confusion, agitation,
disorders		aggression, hallucinations, insomnia,
	Frequency	Suicidal ideation, nightmares
	unknown	
Nervous system	Less frequent	Drowsiness, fatigue, malaise asthenia, tics
disorders	Frequency	Headaches, dizziness, anxiety, nervousness,
	unknown	paraesthesia, convulsions, movement disorders,
		dysgeusia, syncope, tremor, dystonia, dyskinesia,
		amnesia, memory impairment
Eye disorders	Less frequent	Accommodation disorder, blurred vision,
		oculogyration
Ear and labyrinth	Less frequent	Tinnitus, vertigo
disorders		
Cardiac disorders	Less frequent	Palpitations, dysrhythmias, tachycardia
Vascular disorders	Less frequent	Hypotension
Respiratory,	Frequent	Pharyngitis, rhinitis
thoracic and	Less frequent	Thickening of mucous, bronchospasm
mediastinal		
disorders		
Gastrointestinal	Less frequent	Nausea, gastrointestinal discomfort, diarrhoea,
disorders		constipation, dry mouth

Hepatobiliary	Less frequent	Hepatic function abnormal (increased
disorders		transaminase, alkaline phosphatase, $\gamma$ -GT and
		bilirubin), jaundice
	Frequency unknown	Hepatitis
Skin and	Less frequent	Pruritus, rash, urticaria, fixed drug eruption,
subcutaneous tissue disorders		photosensitivity, hair loss, sweating
	Frequency unknown	Acute generalised exanthematous pustulosis
Musculoskeletal,	Less frequent	Myalgia
connective tissue and bone disorders	Frequency unknown	Arthralgia
Renal and urinary	Less frequent	Dysuria, enuresis, urinary retention
disorders		
General disorders	Less frequent	Asthenia, malaise, oedema
and administration site conditions		
Investigations	Less frequent	Weight increased

# **Description of selected adverse reactions**

Skin reactions occurring after discontinuation of **CETICIT SYRUP**:

After discontinuation of CETICIT SYRUP, pruritus (intense itching) and/or urticaria have

been reported (see section 4.4).

# Post-marketing data

Not applicable

# Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare providers are asked to report any suspected adverse reactions to SAHPRA via the **"6.04**"

Adverse Drug Reaction Reporting Form", found online under SAHPRA's publications:

https://www.sahpra.org.za/Publications/Index/8

Adverse Drug Reactions may also report to Adcock Ingram Limited using the following email: <u>Adcock.AEReports@adcock.com</u>

#### 4.9 Overdose

#### Signs and symptoms

Symptoms observed after an overdose of cetirizine, as in **CETICIT SYRUP**, are mainly associated with CNS effects or with effects that could suggest an anticholinergic effect. Drowsiness is an expected symptom of overdosage. Overdosage may produce agitation, confusion, diarrhoea, dizziness, headache, malaise, mydriasis, restlessness, sedation, somnolence, stupor, pruritus, rash, urinary retention, fatigue, tremor and tachycardia.

# Management of overdose

There is no specific antidote. Cetirizine is not effectively removed by dialysis. Further treatment is symptomatic and supportive.

# 5. PHARMACOLOGICAL PROPERTIES

# 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Piperazine derivatives

ATC code: R06A E07

Pharmacological classification: A 5.7.1 Antihistaminics.

#### Mechanism of action

Cetirizine is a metabolite of hydroxyzine. It is a second-generation reversible, competitive inhibitor of histamine at the histamine-1 ( $H_1$ ) receptor. Cetirizine competes with histamine for the  $H_1$ -receptor site. Cetirizine prevents, but does not reverse, pharmacological responses mediated by histamine at the  $H_1$  receptor.

# 5.2 Pharmacokinetic properties

#### Absorption

Cetirizine is well absorbed from the gastrointestinal tract and peak plasma concentrations of 300 ng/mL are reached within 1 hour after oral administration. The extent of absorption of cetirizine is not reduced with food, although the rate of absorption is decreased. The extent of bioavailability is similar when cetirizine is given as solutions or tablets.

No accumulation is observed for cetirizine following daily doses of 10 mg for 10 days. The distribution of pharmacokinetic parameters such as peak plasma concentration (Cmax) and area under curve (AUC), is unimodal.

# Distribution

The apparent volume of distribution is 0,50 l/kg. A high proportion of cetirizine is bound to human plasma proteins (93  $\pm$  0,3 %). Cetirizine does not modify the protein binding of warfarin.

#### **Biotransformation**

Cetirizine does not undergo extensive first-pass metabolism.

#### Elimination

The terminal half-life in adults is approximately 10 hours; in children aged 6 to 12 years, 6 hours; in children aged 2 to 6 years, 5 hours. Cetirizine is eliminated faster in children, and slower in patients with hepatic or renal impairment (creatinine clearance < 40 mL/min), with

a resultant increase in half-life and decrease in clearance. The cumulative urinary excretion represents about two thirds of the dose given in both adults and children.

#### Linearity/non-linearity

Pharmacokinetics are linear over the range of 5 to 60 mg, with plasma concentrations increasing proportionately with increasing doses.

#### Pharmacokinetics in special patient groups

#### Elderly

Following a single 10 mg oral dose in elderly patients, half-life increases by about 50 % and clearance decreases by 40 % compared to younger patients. The decrease in cetirizine clearance in these elderly patients appears to be related to their decreased renal function (see section 4.2).

### Renally impaired patients

The pharmacokinetics of cetirizine are similar in patients with mild impairment (creatinine clearance higher than 40 mL/min) and patients with normal renal function. Patients with moderate renal impairment have a 3-fold increase in half-life and 70 % decrease in clearance compared to patients with normal renal function.

Patients on haemodialysis (creatinine clearance less than 7 mL/min) given a single oral 10 mg dose of cetirizine have a 3-fold increase in half-life and a 70 % decrease in clearance compared to patients with normal renal function. Cetirizine is poorly cleared by haemodialysis. Dosing adjustment is necessary in patients with moderate or severe renal impairment (see section 4.2).

# Hepatically impaired patients

Patients with chronic liver diseases (hepatocellular, cholestatic and biliary cirrhosis) given 10 or 20 mg of cetirizine as a single dose have a 50 % increase in half-life along with a 40

% decrease in clearance compared to healthy patients.

Dosing adjustment is only necessary in hepatically impaired patients if concomitant renal impairment is present (see section 4.2).

# **Paediatric population**

# Children, infants and toddlers

The terminal half-life in adults is approximately 10 hours; in children aged 6 to 12 years, 6 hours; in children aged 2 to 6 years, 5 hours. This is consistent with the urinary excretion half-life of the medicine (see section 4.2).

In infants and toddlers aged 6 to 24 months, it is reduced to 3,1 hours (see section 4.2).

# 5.3 Preclinical safety data

Not applicable.

# 6. PHARMACEUTICAL PARTICULARS

# 6.1 List of excipients

acetic acid

flavour banana LR 4186

glycerol

methyl parahydroxybenzoate (see section 2 & 4.4)

propyl parahydroxybenzoate (see section 2 & 4.4)

propylene glycol

purified water

saccharin sodium

sodium acetate

sorbitol 70% (see section 2, 4.4)

# 6.2 Incompatibilities

Not applicable.

# 6.3 Shelf life

24 months

# 6.4 Special precautions for storage

Store in a well-closed container at or below 25 °C.

Protect from light.

KEEP OUT OF REACH OF CHILDREN.

# 6.5 Nature and contents of container

Amber glass bottles of 60 ml, 100 ml and 200 ml syrup supplied with a 20 ml measuring cup.

Amber glass bottles of 50 ml and 150 ml syrup (without a measuring cup). Not all pack sizes

maybe marketed at the same time.

# 6.6 Special precautions for disposal and other handling

Any unused medicine should be disposed of in accordance with local requirements. No special precautions.

# 7. HOLDER OF CERTIFICATE OF REGISTRATION

Adcock Ingram Limited

1 New Road, Erand Gardens,

Midrand, 1685

Customer care: 0860 ADCOCK/232625

# 8. **REGISTRATION NUMBER(S)**

36/5.7.1/0369

# 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

23/07/2004

# 10. DATE OF REVISION OF THE TEXT

20/02/2024

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