For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

ZIMIG 1% CREAM

Terbinafine Hydrochloride Cream I.P.

QUALITATIVE AND QUANTITATIVE COMPOSITION

ZIMIG cream contains:
Terbinafine Hydrochloride I.P. 1 % w/w
Preservative: Benzyl Alcohol I.P. 1%w/w
in a cream base

PHARMACEUTICAL FORM

Cream

CLINICAL PARTICULARS

Therapeutic Indications

ZIMIG cream is indicated for the topical treatment of:

Fungal infections of the skin caused by dermatophytes such as *Trichophyton* (e.g. *T.rubrum, T. mentagrophytes, T. verrucosum, T.violaceum*), *Microsporum canis* and *Epidermophyton floccosum*, e.g. interdigital type *tinea pedis* (athlete's foot), *tinea cruris* (dhobie (jock) itch) and *tinea corporis* (ringworm).

Pityriasis *(tinea)* versicolor caused by *Pityrosporum orbiculare* (also known as *Malassezia furfur).*

Yeast infections of the skin, principally those caused by the genus Candida (e.g. *Candida albicans*).

Treatment of plantar type *tinea pedis* (moccasin foot)

Posology and Method of Administration

Route of Administration

For cutaneous use only

Elderly

There is no evidence to suggest that elderly patients require different dosages or experience side effects different to those in younger patients.

Adults and adolescents aged 12 years and over

Duration and frequency of treatment:

Interditigal type tinea pedis: Once a day for one week.

Plantar type tinea pedis: Twice a day for two weeks.

Tinea corporis, tinea cruris: Once a day for one week.

Cutaneous candidiasis: Once or twice a day for one to two weeks.

Pityriasis versicolor: Once or twice a day for two weeks.

Clinical symptoms usually start to improve within a few days. Irregular use or premature discontinuation of treatment carries the risk of recurrence.

If there are no signs of improvement within 2 weeks of first starting treatment, patients should see a doctor or pharmacist to verify diagnosis.

Method of administration

Before first use, the sealing membrane of the tube must be pierced using the point incorporated into the screw cap.

The affected area should be cleaned and dried thoroughly before application. The cream should be applied to the affected skin and surrounding area in a thin layer and rubbed in lightly.

In the case of intertriginous infections (submammary, interdigital, intergluteal, inguinal), the application may be covered with a gauze, especially at night.

Children

Not recommended for use in children below 12 years of age due to insufficient data on safety and efficacy.

Contraindications

Contraindicated in patients with a prior hypersensitivity reaction to terbinafine or any other ingredient of the preparation.

Special Warnings and Special Precautions for Use

- May be irritating to the eyes. In case of accidental contact with the eyes, rinse eyes thoroughly with running water.
- Keep out of the sight and reach of children.
- Infants must not be allowed to come into contact with any treated skin, including the breast.
- If applied to face keep away from eyes.
- For external use only.
- Contains cetyl alcohol and stearyl alcohol, which may cause local skin reactions (e.g. contact dermatitis).

Interaction with Other Medicaments and Other Forms of Interaction

There are no clinically relevant drug interactions.

Pregnancy and Lactation

Pregnancy
For terbinafine, no clinical data on exposed pregnancies are available. Animal studies do not indicate any harmful effects with respect to pregnancy or the health of the fetus. It is not appropriate for the consumer to use the product during pregnancy unless clearly necessary.

Lactation
Terbinafine is excreted into breast-milk. After topical use, only a low systemic exposure is expected. Terbinafine should only be used in a nursing mother if the expected benefit justifies the risk to the infant. In addition, infants must not be allowed to come into contact with any treated skin, including the breast.

Effects on Ability to Drive and Use Machines

Cutaneous application of terbinafine has no influence on the ability to drive and use machines.

Undesirable Effects

Clinical Trial and Post Marketing Data

Adverse reactions are listed below by system organ class and frequency.

Frequencies are defined as:
Very common ≥1/10
Common ≥1/100 to <1/10
Uncommon ≥1/1000 to <1/100
Rare ≥1/10000 to <1/1000
Very rare <1/10000
Not known (cannot be estimated from the available data).

Adverse reactions identified during post-marketing use are reported voluntarily from a population of uncertain size, the frequency of these reactions is not known but likely to be rare or very rare. Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness.

Immune system disorders
Not known: hypersensitivity

Eye disorders
Rare: Eye irritation

Skin and subcutaneous tissue disorders

Common: Skin exfoliation, pruritus.
Uncommon: Skin lesion, scab, skin disorder, pigmentation disorder, erythema, skin burning sensation.
Rare: Dry skin, dermatitis contact, eczema.
Not known: Rash.

General disorders and administration site conditions

Uncommon: Pain, application site pain, application site irritation.
Rare: Condition aggravated.

Overdose

Symptoms and signs

The low systemic absorption of topical terbinafine renders overdosage extremely unlikely during cutaneous use. Should terbinafine cream be inadvertently ingested, adverse effects similar to those observed with an overdosage of terbinafine tablets are to be expected.

Symptoms/signs of overdose following ingestion of terbinafine may include headache, nausea, epigastric pain and dizziness.

Treatment

Further management should be as clinically indicated or as recommended by the national poisons centres where available.

In case of accidental oral ingestion, the alcohol content of gel (9.4% w/w), cutaneous solution, cutaneous solution spray, continuous spray (28.87 % (v/v)) and film forming solution (81.05 % (w/w)) has to be considered.

PHARMACOLOGICAL PROPERTIES

Pharmacodynamic Properties

Pharmacotherapeutic group: Antifungals for topical use; other antifungals for topical use.
ATC code: D01AE15.

Mechanism of Action

Terbinafine interferes specifically with fungal sterol biosynthesis at an early step. This leads to a deficiency in ergosterol and to an intracellular accumulation of squalene, resulting in fungal cell death. Terbinafine acts by inhibition of squalene epoxidase in the fungal cell membrane. The enzyme squalene epoxidase is not linked to the cytochrome P-450 system. Terbinafine does not influence the metabolism of hormones or other drugs.

Terbinafine is an allylamine which has a broad spectrum of antifungal activity in fungal infections of the skin caused by dermatophytes such as *Trichophyton* ((e.g. *T. rubrum, T. mentagrophytes, T. verrucosum, T. violaceum), Microsporum canis* and *Epidermophyton floccosum.* At low concentrations terbinafine is fungicidal against dermatophytes, moulds and certain dimorphic fungi. The activity against yeasts is fungicidal (e.g. *Malassezia furfur)* or fungistatic, depending on the species.

Pharmacokinetic Properties

Absorption

Less than 5% of the dose is absorbed after topical application to humans; systemic bioavailability is therefore very low.

Distribution

Following application of cream or gel for 7 days, concentrations of terbinafine in excess of those required for fungicidal activity are available in the affected stratum corneum for at least 7 days after treatment cessation.

Special patient populations

The pharmacokinetics of terbinafine in the stratum corneum is unlikely to be affected in subpopulations. Any effects of sub populations on the systemic pharmacokinetics are also unlikely to be clinically significant due to the very low levels of terbinafine that are found following topical application of terbinafine.

Preclinical Safety Data

Preclinical safety data on terbinafine have not revealed findings which are of relevance to the recommended dosage and use of the product.

PHARMACEUTICAL PARTICULARS

List of Excipients

Sodium Hydroxide, Benzyl Alcohol, Sorbitan Monostearate, Cetyl Palmitate, Cetyl Alcohol, Stearyl Alcohol, Polysorbate 60, Isopropyl Myristate, Purified Water.

Incompatibilities

There are no relevant data available.

Shelf Life

The expiry date is indicated on the label and packaging.

Special Precautions for Storage

Store in a well closed container at temperatures not exceeding 25ºC, protected from light. Do not freeze.

Keep out of reach of children.

Nature and Specification of Container

Aluminium tube in a carton.

Instructions for Use / Handling

For external use only.

There are no other special requirements for use or handling of this product.

For further information, please contact:
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