

SUMMARY OF PRODUCT CHARACTERISTICS (SmPC)

1. Name of the medicinal product

KETOCONAZOLE CREAM

2. Qualitative and quantitative composition

Ketoconazole 2% w/w (each gram of cream contains 20 mg).

Excipient(s) with known effect:

This medicine contains:

200 mg propylene glycol in each gram cream,

75 mg stearyl alcohol in each gram cream,

20 mg cetyl alcohol in each gram cream.

For a full list of excipients, see 6.1.

3. Pharmaceutical form

Cream

4. Clinical particulars

4.1 Therapeutic indications

For topical application in the treatment of dermatophyte infections of the skin such as tinea corporis, tinea cruris, tinea manus and tinea pedis infections due to Trichophyton spp, Microsporon spp and Epidermophyton spp. Nizoral 2% cream is also indicated for the treatment of cutaneous candidosis (including vulvitis), tinea (pityriasis) versicolor and seborrheic dermatitis caused by Malassezia (previously called Pityrosporum) spp.

4.2 Posology and method of administration

Ketoconazole cream is for use in adults.

Cutaneous candidosis, tinea corporis, tinea cruris, tinea manus, tinea pedis and tinea (pityriasis) versicolor:

It is recommended that Ketoconazole cream be applied once or twice daily to cover the affected and immediate surrounding area.

The usual duration of treatment is: *tinea versicolor* 2–3 weeks, yeast infections 2-3 weeks, *tinea cruris* 2-4 weeks, *tinea corporis* 3–4 weeks, *tinea pedis* 4-6 weeks.

Seborrheic dermatitis:

Ketoconazole cream should be applied to the affected areas once or twice daily.

The usual initial duration of treatment in seborrheic dermatitis is 2 to 4 weeks. Maintenance therapy can be applied intermittently (once weekly) in seborrheic dermatitis.

Treatment should be continued until a few days after the disappearance of all symptoms. The diagnosis should be reconsidered if no clinical improvement is noted after 4 weeks of treatment. General measures in regard to hygiene should be observed to control sources of infection or reinfection.

Seborrheic dermatitis is a chronic condition and relapse is highly likely.

Method of administration: Cutaneous administration.

Paediatrics patients

The safety and efficacy of Ketoconazole cream in children (17 years of age and younger) has not been established.

4.3 Contraindications

Ketoconazole cream is contra-indicated in patients with a known hypersensitivity to any of the ingredients or to ketoconazole itself.

4.4 Special warnings and precautions for use

Ketoconazole cream is not for ophthalmic use.

If co-administered with a topical corticosteroid, to prevent a rebound effect after stopping a prolonged treatment with topical corticosteroids it is recommended to continue applying a mild topical corticosteroid in the morning and to apply Ketoconazole cream in the evening, and to subsequently and gradually withdraw the topical corticosteroid therapy over a period of 2-3 weeks.

Ketoconazole cream contains 6000 mg propylene glycol in each 30 g tube, which is equivalent to 200 mg/g.

Ketoconazole cream contains cetyl alcohol and stearyl alcohol, which may cause local skin reactions (e.g. contact dermatitis).

4.5 Interaction with other medicinal products and other forms of interaction

No interaction studies have been performed.

4.6 Fertility, pregnancy and lactation

There are no adequate and well-controlled studies in pregnant or lactating women. Data on a limited number of exposed pregnancies indicate no adverse effects of topical ketoconazole on pregnancy or on the health of the foetus/newborn child. Animal studies have shown reproductive toxicity at doses that are not relevant to the topical administration of ketoconazole.

Plasma concentrations of ketoconazole are not detectable after topical application of Ketoconazole Cream to the skin of non-pregnant humans. (See Pharmacokinetic properties, section 5.2) There are no known risks associated with the use of Ketoconazole Cream in pregnancy or lactation.

4.7 Effects on ability to drive and use machines

Ketoconazole cream has no influence on the ability to drive and use machines.

4.8 Undesirable effects

The safety of ketoconazole cream was evaluated in 1079 subjects who participated in 30 clinical trials. Ketoconazole cream was applied topically to the skin. Based on pooled safety data from these clinical trials, the most commonly reported ($\geq 1\%$ incidence) adverse reactions were (with % incidence): application site pruritus (2%), skin burning sensation (1.9%), and application site erythema (1%).

Including the above-mentioned adverse reactions, the following table displays adverse reactions that have been reported with the use of ketoconazole cream from either clinical trial or postmarketing experiences. The displayed frequency categories use 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 clinical trial data).

System Organ Class	Adverse Reactions		
	Frequency Category		
	Common ($\geq 1/100$ to $< 1/10$)	Uncommon ($\geq 1/1,000$ to $< 1/100$)	Not Known
Immune System Disorders		Hypersensitivity	
Skin and Subcutaneous Tissue Disorders	Skin burning sensation	Bullous eruption Dermatitis contact Rash Skin exfoliation Sticky skin	Urticaria
General Disorders and Administration Site Conditions	Application site erythema Application site pruritus	Application site bleeding Application site discomfort Application site dryness Application site inflammation Application site irritation Application site paresthesia Application site reaction	

4.9 Overdose

Topical Application

Excessive topical application may lead to erythema, oedema and a burning sensation, which will disappear upon discontinuation of the treatment.

Ingestion

In the event of accidental ingestion, supportive and symptomatic measures should be carried out.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antifungals for Topical Use, Imidazole and triazole derivatives

ATC Code: D01AC08

Usually ketoconazole cream acts rapidly on pruritus, which is commonly seen in dermatophyte and yeast infections, as well as skin conditions associated with the presence of *Malassezia* spp. This symptomatic improvement is observed before the first signs of healing are observed.

Ketoconazole, a synthetic imidazole dioxolane derivative, has a potent antimycotic activity against dermatophytes such as *Trichophyton* spp., *Epidermophyton floccosum* and *Microsporum* spp. and against yeasts, including *Malassezia* spp. and *Candida* spp. The effect on *Malassezia* spp. is particularly pronounced.

A study in 250 patients has shown that application twice daily for 7 days of ketoconazole 2% cream vs clotrimazole 1% cream for 4 weeks on both feet demonstrated efficacy in patients with tinea pedis (athlete's foot) presenting lesions between the toes. The primary efficacy endpoint was negative microscopic KOH examination at 4 weeks. Ketoconazole 2% treatment showed equivalent efficacy to 4 weeks clotrimazole 1% treatment. There was no evidence of relapse following treatment with ketoconazole cream at 8 weeks.

5.2 Pharmacokinetic properties

Plasma concentrations of ketoconazole were not detectable after topical administration of Ketoconazole Cream in adults on the skin. In one study in infants with seborrhoeic dermatitis (n = 19), where approximately 40 g of Ketoconazole cream was applied daily on 40% of the body surface area, plasma levels of ketoconazole were detected in 5 infants, ranging from 32 to 133 ng/mL.

5.3 Preclinical safety data

Effects in non-clinical studies were observed only at exposures considered sufficiently in excess of the maximum human exposure indicating little relevance to clinical use.

6. Pharmaceutical particulars

6.1 List of excipients

Propylene Glycol

Stearyl Alcohol

Cetyl Alcohol

Sorbitan Stearate

Polysorbate 60

Isopropyl Myristate

Sodium Sulphite Anhydrous (E221)

Polysorbate 80

Water purified (Ph. Eur)

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

36 months.

6.4 Special precautions for storage

Do not store above 30°C.

6.5 Nature and contents of container

The gel is filled into lamitube and packed in inner carton along with leaflet. Pack sizes available are 30g.

6.6 Special precautions for disposal and other handling

No special requirements.

7.0 Marketing Authorization Holder:

PATRICKLINGO PHARMACEUTICAL LTD.

13, Obianwu Street,

Onitsha, Anambra State, Nigeria.

7.1 Manufacturer:

FANTASY DRUGS PVT. LTD

Plot No. C-66 -69, D-33 -36, Industrial Area, Hajipur, Vaishali,

Bihar-844 101, INDIA.

8.0 Marketing Authorization Numbers: New Registration

9.0 Date of the First Authorization or Renewal: Not Applicable

10.0 Date of Revision of the Text: Not Applicable