Afert® (Terbinafine) 125mg, 250mg Tablets U.S.P.

ایفرٹ ٹیبلٹس یو۔ایس۔پی۔
(ٹربینافائن) ۱۲۵ ملی گرام ۲۵۰ ملی گرام

QUALITATIVE AND QUANTITATIVE COMPOSITION

Afert® Tablets U.S.P. 125mg
Each tablet contains:
Terbinafine Hydrochloride U.S.P. eq. to Terbinafine.....125mg

Afert® Tablets U.S.P. 250mg
Each tablet contains:
Terbinafine Hydrochloride U.S.P. eq. to Terbinafine.....250mg

DESCRIPTION

Terbinafine is an antifungal antibiotic used to treat infections caused by fungus that affect the fingernails or toenails (onychomycosis).

CLINICAL PHARMACOLOGY

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 P450 system. When given orally, the drug concentrates in skin and nails at levels associated with antifungal activity. Pharmacodynamics: Terbinafine is an allylamine with antifungal activity mainly against dermatophytes, including Trichophyton (e.g. T. rubrum, T. mentagrophytes, T. verrucosum, T. violaceum), Microsporum canis, and Epidermophyton floccosum. **Pharmacokinetics:** Absorption: Following oral administration, terbinafine is well absorbed (>70%) and the bioavailability of terbinafine hydrochloride from Afert tablets as a result of first-pass metabolism is approximately 40%. The absorption half-life is 0.8 hours and the distribution half-life is 4.6 hours. An increase in the AUC of terbinafine of less than 20% is observed when Afert tablets are administered with food. **Distribution:** Terbinafine binds strongly to plasma proteins (99%). Terbinafine is also secreted in sebum, thus achieving high concentrations in hair follicles, hair and sebumrich skins. Metabolism: Terbinafine is extensively metabolized in the body. Biotransformation results in metabolites with no antifungal activity. **Excretion:** Terbinafine and its metabolites are excreted predominantly in the urine. No age-dependent changes in pharmacokinetics have been observed.

INDICATIONS AND USAGE

- Treatment in adults of ringworm (tinea corporis, tinea cruris and tinea pedis) due to infection caused by dermatophytes such as Trichophyton (e.g. T. rubrum, T. mentagrophytes, T. verrucosum, T. violaceum), Microsporum canis and Epidermophyton floccosum, where oral therapy is considered appropriate owing to the site, severity or extent of the infection, and the infection is not responsive to topical therapy.
- Onychomycosis in adults (fungal infection of the nail) caused by dermatophyte fungi.

CONTRAINDICATIONS

- Hypersensitivity to terbinafine or to any of the excipients in the formulation.
- Severe, chronic, or active hepatic disease

INTERACTIONS

The plasma clearance of terbinafine may be accelerated by drugs, which induce metabolism and may be inhibited by drugs, which inhibit cytochrome P450. Where co-administration of such agents is necessary, the dosage of

Afert tablets may need to be adjusted accordingly. There have been spontaneous reports of increase or decrease in prothrombin time in patients taking oral terbinafine and warfarin concomitantly. However, a causal relationship between Afert tablets and these changes has not been established. Cautious use of Terbinafine tablets are advised in women taking oral contraceptives since a few cases of menstrual disorders have been reported in patients taking this drug combination, although the incidence of these disorders remains within the background incidence of patients taking oral contraceptives alone. The following medicinal products may increase the effect or plasma concentration of terbinafine Cimetidine decreased the clearance of terbinafine by 33%. Fluconazole significantly increased the Cmax and AUC of terbinafine, due to inhibition of both CYP2C9 and CYP3A4 enzymes. Similar increase in exposure may occur when other drugs which inhibit both CYP2C9 and CYP3A4, such as ketoconazole and amiodarone, are concomitantly administered with terbinafine. The following medicinal products may decrease the effect or plasma concentration of terbinafine. Rifampicin increased the clearance of terbinafine by 100%. Effect of terbinafine on other medicinal products Terbinafine does not interfere with the clearance of antipyrine or digoxin. Terbinafine clearance is unaffected by cyclosporin. There was no effect of terbinafine on the pharmacokinetics of fluconazole. Further there was no clinically relevant interaction between terbinafine and the potential comedications cotrimoxazole (trimethoprim and sulfamethoxazole), zidovudine or theophylline. Terbinafine may increase the effect or plasma concentration of the following medicinal products: Compounds predominantly metabolised by CYP2D6: Terbinafine inhibits the CYP2D6-mediated metabolism, therefore patients receiving concomitant treatment with drugs predominantly metabolised by this enzyme, such as tricyclic antidepressants (TCAs; e.g. desipramine), beta-blockers, selective serotonin reuptake inhibitors (SSRIs), antiarrhythmics Class 1A, 1B, and IC, and monoamine oxidase inhibitors (MAOIs) Type B, should be followed, especially if the co-administered drug has a narrow therapeutic window. terbinafine significantly increased the extrome-thorphan/dextrorphan metabolic ratio in urine. Thus, terbinafine may convert extensive CYP2D6 metabolisers to poor metaboliser status. Caffeine - Terbinafine decreased the clearance of caffeine administered intravenously by 19%. Terbinafine may decrease the effect or plasma concentration of the following medicinal products Cyclosporin - Terbinafine increased the clearance of cyclosporin by 15%.

USE IN SPECIFIC POPULATION

Pregnancy: Pregnancy Category B1: Afert tablets should not be used during pregnancy unless the potential benefits outweigh any potential risks. **Lactation:** Terbinafine is excreted in breast milk. Therefore, mothers receiving oral treatment with Afert tablets should not breastfeed. **Pediatric Use:** There is no experience with terbinafine in children and its use cannot be recommended. **Geriatric use:** When using Afert tablets in this age group, the possibility of impairment of liver or kidney function should be considered. **Renal Impairment:** The use of Afert tablets in patients with impaired renal function (creatinine clearance less than 50 mL/min or serum creatinine of more than 300 micromol/L) has not been adequately studied and therefore is not recommended. **Hepatic Impairment:** Afert tablets are contraindicated for patients with chronic or active hepatic disease.

PRECAUTIONS

Effect on vision: The clinical relevance of this observation is unknown. **Effect on blood:** Patients taking Afert tablets are at risk of developing agranulocytosis, thrombocytopenia, pancytopenia and neutropenia, which are very rarely associated with terbinafine Prescribers should examine the patient to determine the correct aetiology of any blood dyscrasias that occur in patients treated with Afert tablets, and consideration should be given to a possible change in medication regimen, including discontinuation of treatment with Afert tablets. **Dermatological Effects:** If progressive skin rash occurs, Afert tablet treatment should be discontinued. Terbinafine should be used with caution in

patients with pre-existing psoriasis or lupus erythematosus as precipitation and exacerbation of psoriasis and cutaneous and systemic lupus erythematosus have been reported in a post marketing setting. **Effects on laboratory tests:** Transient decreases in absolute lymphocyte counts (ALC): In patients with known or suspected immunodeficiency, physicians should consider monitoring complete blood counts in individuals using Afert tablet therapy for greater than six weeks. Effect on lipids: In other clinical trials there was no evidence of a significant change in the plasma lipid profile of patients.

ADVERSE REACTIONS

General side-effects: Common or very common: Skin reactions Specific side effects. Common or very common: With oral use: Appetite decreased. arthralgia . diarrhoea. gastrointestinal discomfort . gastrointestinal disorder . headache. myalgia. nausea Uncommon: With oral use: Taste altered Rare or very rare: With oral use: Agranulocytosis. alopecia. cutaneous lupus erythematosus. dizziness . hepatic disorders . malaise. neutropenia . photosensitivity reaction. sensation. abnormal. severe cutaneous adverse reactions (SCARs). systemic lupus erythematosus (SLE) . thrombocytopenia . vertigo **Frequency not known:** With oral use Anaemia • anxiety • depressive symptom • fatigue • fever • hearing impairment. influenza like illness. pancreatitis. pancytopenia. rhabdomyolysis • serum sickness-like reaction • smell altered • tinnitus • vasculitis • vision disorders.

DOSAGE AND ADMINISTRATION

Tinea pedis: By mouth using tablets: **Adult:** 250 mg once daily for 2-6 weeks. **Tinea corporis:** By mouth using tablets: **Adult:** 250 mg once daily for 4 weeks. **Tinea cruris:** By mouth using tablets: **Adult:** 250 mg once daily for 2-4 weeks. **Dermatophyte infections of the nails:** By mouth using tablets: **Adult:** 250mg once daily for 6 weeks-3 months (occasionally longer in toenail infections) or as directed by the physician.

OVERDOSAGE

The relevance of those effects to man is unknown. However, these effects can be monitored. Central Nervous System: headache and dizziness. Gastrointestinal system: nausea, and epigastric pain. The recommended treatment of overdosage consists in eliminating the drug, primarily by the administration of activated charcoal, and giving symptomatic supportive therapy, if needed. Activated charcoal may reduce absorption of the drug if given within one or two hours after ingestion. In patients who are not fully conscious or have impaired gag reflex, consideration should be given to administering activated charcoal via a nasogastric tube, once the airway is protected.

INSTRUCTIONS

Store at 20°C-25°C, excursions permitted to 15°C to 30°C. Protect from light and moisture. Keep all medicines out of the reach of children.

PRESENTATION

Afert® (Terbinafine Hydrochloride) Tablets U.S.P. 125mg are available in Alu-Alu blister pack of 10's.

Afert® (Terbinafine Hydrochloride) Tablets U.S.P. 250mg are available in Alu-Alu blister pack of 10's.

خوراک: ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔

ہدایات: ۲۰ سے ۲۵ ڈگری سینٹی گریڈ پر رکھیں محفوظ رکھنے کی حد ۱۵ سے ۳۰ ڈگری سینٹی گریڈ ہے۔
روشنی اور نمی سے محفوظ رکھیں۔ تمام دوائیں بچوں کی پہنچ سے دور رکھیں۔

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ISO 9001:2015 ISO 14001:2015 ISO 45001:2018
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