COMPOSITION
Ketoral® tablet : Each tablet contains ketoconazole USP 200 mg

PHARMACOLOGY
Ketoconazole is usually fungistatic in action, but may be fungicidal at high concentrations after prolonged incubation or against very susceptible organisms.

Like other imidazole derivatives, ketoconazole presumably exerts its antifungal activity by altering cellular membranes, resulting in increased membrane permeability, secondary metabolic effects, and growth inhibition. Although the exact mechanism of action of ketoconazole has not been fully determined, it has been suggested that the fungistatic activity of the drug may result from interference with ergosterol synthesis probably via inhibition of C-14 demethylation of sterol intermediates (e.g. lanosterol). Like some other imidazole derivatives (e.g. miconazole) the fungicidal activity of ketoconazole at high concentrations may result from a direct physicochemical effect of the drug on the fungal cell membrane, but the direct effect of ketoconazole on cell membranes appears to be substantially less than that of miconazole.

INDICATION
1. Treatment of superficial and deep mycoses:
Infections of the skin, hair, and nails by dermatophytes and/or yeasts (dermatomycosis, onychomycosis, pityriasis versicolor, chronic mucocutaneous candidiasis, etc.), especially when topical treatment is difficult or not very effective, owing to involvement of large skin surfaces or to lesions affecting deeper dermal layers, nails and hairs.
Yeast infection of the mouth (oral thrush, perleche) and the gastrointestinal tract.
Vaginal candidiasis, especially chronic recurrent cases or cases responding poorly to topical treatment.
Systemic mycotic infections such as systemic candidiasis, paracoccidioidomycosis, histoplasmosis, coccidioidomycosis, etc.

2. Maintenance treatment to prevent recurrence in systemic mycotic infections and in chronic mucocutaneous candidiasis.
3. Prophylactic treatment to prevent mycotic infection in patients with reduced host defences e.g. patients with cancer, organ transplant burns.

**DOSAGE AND ADMINISTRATION**

Vaginal candidiasis: 1 tablet b.i.d. for 5 days.

All other indications:

*Adults*: 1 tablet (200 mg) once daily until at least one week after the symptoms have disappeared and the cultures have become negative.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Duration of treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pityriasis versicolor</td>
<td>1 to 6 weeks</td>
</tr>
<tr>
<td>Dermatomycosis</td>
<td>2 to 8 weeks</td>
</tr>
<tr>
<td>Onychomycosis</td>
<td>1 to 12 months</td>
</tr>
<tr>
<td>Mycoses of hair and scalp</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Chronic mucocutaneous candidiasis</td>
<td>1 to 12 months</td>
</tr>
<tr>
<td>Systemic candidiasis</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Oral mycoses</td>
<td>5 to 10 days</td>
</tr>
<tr>
<td>Paracoccidioidomycosis, histoplasmosis and other</td>
<td>1 month to 2 years</td>
</tr>
<tr>
<td>Systemic mycosis</td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>3 to 5 mg/kg/day.</td>
</tr>
</tbody>
</table>

**Remark**

Ketoconazole should be taken at meal times for maximal absorption. Because absorption depends on intact gastric activity, the concomitant treatment with agents that reduce gastric secretion (anticholinergic drugs, antacids, H2 blockers) should be avoided. When indicated, such drugs should be taken not earlier than two hours after ketoconazole. If clinical responsiveness is insufficient within the expected time, the dose of ketoconazole may be doubled (400 mg once daily).

**CONTRAINDICATION AND PRECAUTION**

Ketoral is contraindicated in pregnancy and patients with acute liver pathology. In patients with a previous history of liver disease, liver enzyme levels should be monitored during treatment. When patients develop symptoms indicative of liver reaction, such as nausea, or fatigue, accompanied with pale feces, dark urine or jaundice, Ketoral therapy should be stopped immediately.
SIDE EFFECT
Ketoral is well tolerated. Nausea and itching may occasionally occur. In some patients an idiosyncratic liver reaction may occur (incidence 1:10000).

DRUG INTERACTION
The clinical importance has not been determined, but ketoconazole and acyclovir have shown dose-dependent, synergistic, antiviral activity against herpes simplex virus type 1 and 2 in in-vitro replication studies. Ketoconazole and vidarabine showed interference, indifference or antagonism in vitro against these viruses.

USE IN PREGNANCY AND LACTATION
Ketoconazole is contraindicated in pregnancy. Breast-feeding is contraindicated in patients taking this drug.

STORAGE CONDITION
Should be stored in a dry place below 30°C.

HOW SUPPLIED
Ketoral tablet: Box containing 3 x 10 tablets in blister pack.