Xpos™

Posaconazole

Composition

Xpos™ 100 DR Tablet: Each Delayed Release Tablet contains Posaconazole INN 100 mg.

Pharmacology

Posaconazole blocks the synthesis of ergosterol, a key component of the fungal cell membrane. It inhibits the cytochrome P-450 dependent enzyme Lanosterol 14-α-demethylase responsible for the conversion of lanosterol to ergosterol in the fungal cell membrane. This results in an accumulation of methylated sterol precursors and a depletion of ergosterol within the cell membrane, thus weakening the structure and function of the fungal cell membrane.

Indication

Posaconazole is indicated in patients aged 13 years and above for the treatment of following fungal infections:

- Invasive aspergillosis in patients with disease that is refractory or intolerant to Amphotericin B or Itraconazole
- Fusariosis in patients with disease that is refractory or intolerant to Amphotericin B
- Chromoblastomycosis and mycetoma in patients with disease that is refractory or intolerant to Itraconazole
- Coccidioidomycosis in patients with disease that is refractory or intolerant to Amphotericin B, Itraconazole or Fluconazole or in patients who are intolerant of these medicinal products.

Also indicated for prophylaxis of invasive fungal infections in the following patients:

- Patients receiving remission-induction chemotherapy for Acute Myelogenous Leukemia (AML) or Myelodysplastic Syndromes (MDS) expected to result in prolonged neutropenia and who are at high-risk of developing invasive fungal infections
- Hematopoietic Stem Cell Transplant (HSCT) recipients who are undergoing high-dose immunosuppressive therapy for graft versus host disease and who are at high-risk of developing invasive fungal infections Refractoriness is defined as progression of infection or failure to improve after a minimum of 7 days of prior therapeutic doses of effective antifungal therapy.

Dosage & Administration

Posaconazole Tablets can be taken with or without food. The tablets should be swallowed whole with water and should not be crushed, chewed, or broken.
Loading Dose: 300 mg (3 Tablets) twice a day on the first day
Maintenance Dose: 300 mg (3 Tablets) once a day from the second day
Duration of therapy should be based on the severity of the underlying disease, recovery from immunosuppression and clinical response.

Contraindication

Posaconazole is contraindicated in persons with known hypersensitivity to Posaconazole or other azole antifungal agents. Co-administration with ergot alkaloids, CYP3A4 substrates, Terfenadine, Astemizole, Cisapride, Pimozide, Halofantrine or Quinidine since this may result in increased plasma concentrations of these medicinal products leading to QTc prolongation and rare occurrences of torsades de pointes, HMG-CoA reductase inhibitors simvastatin, lovastatin and atorvastatin is contraindicated.

Side effect

Common treatment-emergent adverse reactions in studies with Posaconazole are diarrhea, nausea, fever, vomiting, headache, coughing and hypokalemia.

Drug interaction

Posaconazole is an inhibitor of CYP3A4 and should only be used under specific circumstances during treatment with other medicinal products that are metabolized by CYP3A4 like Midazolam, Triazolam, Alprazolam. Posaconazole concentrations may be significantly lowered in combination with Rifamycin antibacterials (Rifampicin, Rifabutin), certain anticonvulsants (Phenytoin, Carbamazepine, Phenobarbital, Primidone and Efavirenz).

Pregnancy & Lactation

Posaconazole must not be used during pregnancy unless the benefit to the mother clearly outweighs the potential risk to the fetus. Breast-feeding must be stopped on initiation of treatment with this drug.

Pediatric Use

Safety and effectiveness in pediatric patients below the age of 13 years has not been established. Therefore, Posaconazole is not recommended for pediatric patients less than 13 years of age.

Geriatric Use

No dose adjustment is necessary for geriatric patients.

Hepatic Impairment

Posaconazole should be used with caution in patients with hepatic impairment due to limited clinical experience and the possibility that posaconazole plasma levels may be higher in these patients. Liver function tests should be evaluated at the start of and during the course of posaconazole therapy.

Renal Impairment

No dose adjustment is required in patients with mild (eGFR: 50-80 mL/min/1.73 m^2) to moderate renal impairment (eGFR: 20-49 mL/min/1.73 m^2). Patients with severe renal impairment should be monitored closely for breakthrough fungal infections.

Storage condition

Store below 25°C. Keep out of the reach of children.

How supplied

Xpos™ 100 DR Tablet: Each pack contains 10 Tablets in Alu-PVC Blister Packaging.

Manufactured by

SQUARE
PHARMACEUTICALS LTD.
BANGLADESH