

# Pyrazinamide

**Zcure®**

250 mg/5 mL suspension  
Antituberculosis

**Formulation:**

Each 5mL suspension contains:

Pyrazinamide..... 250mg

**Indication:**

All forms of pulmonary and extrapulmonary tuberculosis due to strains of *Mycobacterium tuberculosis* sensitive to pyrazinamide. When treating all forms of tuberculosis, pyrazinamide is used as part of multi-drug regimens for the treatment of tuberculosis, primarily in the initial 8-week phase of short-course treatment.

**Pharmacodynamic:**

Pyrazinamide has a bactericidal effect *Mycobacterium tuberculosis* but appears to have no activity against other mycobacteria or microorganisms *in vitro*. The MIC for *M. tuberculosis* is less than 20 ug per mL at pH 5.6 it is almost completely inactive at a neutral pH. Pyrazinamide is effective against persisting tubercle bacilli within the acidic intracellular environment of the macrophages. The initial inflammatory response to chemotherapy increases the number of organisms in the acidic environment. As inflammation subsides and pH increases, the sterilizing activity of pyrazinamide decreases. This pH-dependent activity explains the clinical effectiveness of pyrazinamide as part of the initial 8-week phase in short-course treatment regimens. In order to avoid inducing bacterial resistance when used alone, pyrazinamide should always be given together with other antituberculous drugs.

**Pharmacokinetic:**

Pyrazinamide is readily absorbed from the gastrointestinal tract. Peak serum concentrations occur about 2 hours after a dose by mouth and have been reported to be about 35 ug per ml after 1.5 g and 66 ug per mL after 3 g. Pyrazinamide is widely distributed in body fluids and tissues and diffuses in the CSF. The half-life has been reported to be about 9 to 10 hours. It is metabolised primarily in the liver by hydrolysis to the major active metabolite pyrazinoic acid which is subsequently hydroxylated to the major excretory product 5-hydropyrazinoic acid. It is excreted through the kidney mainly by glomerular filtration. About 70% of a dose appears in the urine within 24 hours mainly as metabolites and 4 to 14% as unchanged drug. Pyrazinamide is removed by dialysis. It is excreted in breast milk.

**Adverse Reactions:**

Liver toxicity is the most serious side-effect of pyrazinamide and it depends on the dosage, duration of treatment and concomitant therapy.

Other side effects are anorexia, nausea, vomiting, anthralgia, malaise, fever, sideroblastic anaemia and dysuria. Photosensitivity and skin rashes have been reported on rare occasions.

**Precautions:**

Pyrazinamide is contraindicated in patients with liver damage, but if treatment is necessary, the dosage must be reduced. Liver functions should be assessed before and regularly during treatment.

Caution should be observed in patients with impaired renal functions or a history of gout. Pyrazinamide should be discontinued, in the event of severe anthralgia or attack of gout.

Pyrazinamide should be used with caution in patients with diabetes mellitus, as their management may become more difficult.

**Warning**

Hypersensitivity: Stop all drugs and evaluate at the first sign of a hypersensitivity reaction. Careful monitoring of hepatic function is recommended with the concurrent use of Pyrazinamide.

**Interactions**

**Pyrazinamide:** The use of pyrazinamide is contraindicated in patients with severe liver damage. Pyrazinamide may cause hepatocellular injury, particularly in patients with underlying liver disease and during co-administration with other hepatotoxic agents including other anti-tuberculosis drugs such as isoniazid and rifampin. Therapy with pyrazinamide should be administered cautiously and under strict medical supervision in patients with liver disease or a history of alcoholism.

**Use in pregnancy and lactation:**

Pyrazinamide should not be given during pregnancy unless the potential benefit outweighs the potential risk to the fetus.

Pyrazinamide passes into the breast milk; the adverse effects on the infant are unknown. Therefore, the benefits and risks of nursing infant should be carefully considered.

**Caution:**

Foods, Drugs, Devices and Cosmetics Act prohibits dispensing without prescription.

**Dosage And Administration:**

Pyrazinamide is usually given daily or 3 times a week. Recommended doses by mouth for adults and children are up to 35 mg per kg body-weight daily (maximum daily dose is 3 g) or 50 mg per kg three times a week, or 75 mg per kg twice weekly. In partial intermittent therapy, pyrazinamide is administered daily for the first 2 months with isoniazid and rifampicin. Afterwards, treatment with isoniazid and rifampicin will continue for the next 4 months.

**Overdosage**

Do not take more than prescribed dose. Taking more medication will not improve your symptoms; rather they may cause poisoning or serious side-effects. If you suspect that you or anyone else who may have overdosed of Zcure Suspension, please go to the emergency department of the closest hospital or nursing home. Do not give your medicines to other people even if you know that they have the same condition or it seems that they may have similar conditions. Please consult your physician or pharmacist for more information.

"For suspected adverse drug reaction, report to the FDA: [www.fda.gov/ph](http://www.fda.gov/ph)"

**Availability:**

250 mg/5 mL suspension - Bottle of 120 mL

Registration Number: DR-XY27677  
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Revision Date: April 2022

**STORE AT TEMPERATURES NOT EXCEEDING 30°C  
SHAKE WELL THE SUSPENSION BEFORE USING**

Manufactured for  
Natrapharm, Inc.  
The Patriot Building  
Km 18, West Service Road  
SLEX, Sucat, Parañaque City  
by Lloyd Laboratories, Inc.  
No. 10, Lloyd Ave.,  
First Bulacan Industrial City,  
City of Malolos, Bulacan