

Lepinza 10mg  
(Olanzapine)  
Lepinza 5mg  
(Olanzapine)

لیپینزا ۱۰ میلوگرام  
(اولانزاپین)

لیپینزا ۵ میلوگرام  
(اولانزاپین)

**COMPOSITION:**

Each film coated tablet contains Olanzapine.....5mg  
Each film coated tablet contains Olanzapine.....10mg

**DESCRIPTION:**

Lepinza (Olanzapine) is a psychotropic agent that belongs to the thienobenzodiazepine class. The chemical designation is 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno [2, 3-b] [1, 5] benzodiazepine. The molecular formula is C17H20N4S, and its molecular weight is 312.44.

**PHARMACOLOGY:**

Olanzapine is a selective monoaminergic antagonist with high affinity binding to the following receptors: serotonin 5HT<sub>2A/2C</sub>, 5HT<sub>6</sub> dopamine D<sub>1-4</sub>, histamine H<sub>1</sub>, and adrenergic alpha 1 receptors. Olanzapine is an antagonist with moderate affinity binding to serotonin 5HT<sub>3</sub> and muscarinic M<sub>1-5</sub>. Olanzapine is well absorbed and reaches peak concentration in approximately 6 hours following an oral dose. It is eliminated extensively by first pass metabolism, with approximately 40% of the dose metabolized before reaching the systemic circulation. Food does not affect the rate or extent of Olanzapine absorption. Its half life ranges from 21 to 54 hours, and apparent plasma clearance ranges from 12 to 47 L/hr. Plasma concentrations, half-life and clearance of Olanzapine may vary between individuals on the basis of smoking status, gender, and age. Olanzapine is extensively distributed throughout the body, with a volume of distribution of approximately 1000L. It is 93% bound to plasma proteins over the concentration range of 7 to 100mg/ml, binding primarily to albumin and alpha acid glycoprotein. Approximately 57% and 30% of the dose was recovered in the urine and feces, respectively. After multiple dosing, the major circulating metabolites were the 10-N-glucuronide, present at steady state at 44% of the concentration of Olanzapine. Direct glucuronidation and cytochrome P450 (CYP) mediated oxidation are the primary metabolic pathways for Olanzapine.

**INDICATION:**

*Schizophrenia:* Lepinza is indicated for the treatment of schizophrenia.

*Bipolar Disorder:* Acute Monotherapy: Lepinza is indicated for the treatment of acute mixed of manic episodes associated with Bipolar disorder

**CONTRAINDICATIONS:**

Lepinza is contraindicated in patients with a known hypersensitivity to the products. *Possible adverse effects:* Dental pain & flue syndrome, hypotension, flatulence, increased salivation & thirst, diabetes mellitus, joint stiffness & twitching, abnormal dreams, amnesia, delusions, emotional lability, euphoria, manic reaction, paresthesia & schizophrenic reaction, dyspnea, sweating, conjunctivitis, vaginitis.

Overdosage symptoms with 10% incidence included agitation/aggressiveness, dysarthria, tachycardia, various extrapyramidal symptoms, and reduced level of consciousness ranging from sedation to coma. In case of acute overdosage, establish and maintain an airway and ensure adequate oxygenation and ventilation, which may include intubations. Gastric lavage (after intubation, if patients are unconscious) and administration of activated charcoal together with a laxative should be considered.

**Storage Condition:**

Store in a cool dry place and dark place between 15-30C. Keep all medicine out of the reach of children.

**Presentation**

Lepinza 10mg Tablet is available in alu alu blister packing containing (1x10's).  
Lepinza 5mg Tablet is available in alu alu blister packing containing (1x10's).

Manufactured by:

**NEXUS**

Nexus Pharma (Pvt.) Ltd.  
Plot No. 4/19 - 436, Sector 21,  
Korangi Industrial Area, Karachi

Marketed by:



**DRUG INTERACTIONS:**

Given the primary CNS effects of Olanzapine, caution should be used when Olanzapine is taken in combination with other centrally acting drugs and alcohol. Because of its potential for inducing hypotension, Olanzapine may enhance the effects of certain antihypertensive agents. Olanzapine may antagonize the effects of levodopa and dopamine antagonists.

*The effect of other drug on Olanzapine:* Agents that induce CYP<sub>1A2</sub> or glucuronyl transferase enzymes, such as omeprazole and rifampin, may cause an increase in Olanzapine clearance. Inhibitors of CYP<sub>1A2</sub> could potentially inhibit Olanzapine clearance. Although Olanzapine is metabolized by multiple enzyme systems, indication or inhibition of single enzyme may appreciably affect Olanzapine clearance. Therefore a dose increase (for induction) or a dosage decrease (for inhibition) may need to be considered with specific drugs.

*Charcoal:* the administration of activated charcoal (1g) reduced the C<sub>max</sub> and AUC of oral Olanzapine by about 60%. As peak Olanzapine levels are not typically obtained until about 6 hours after dosing, charcoal may be a useful treatment for Olanzapine overdose. *Cimetidine & antacids:* Single doses of cimetidine (800mg) or aluminum-and magnesium-containing antacids did not affect the bioavailability of Olanzapine. This increase is likely due to the fact that carbamazepine is a potent inducer of CYP 1A2 activity.

*Ethanol:* Ethanol (45 mg/70kg single dose) did not have an effect on Olanzapine pharmacokinetics. *Fluoxetine:* Fluoxetine (50 mg single dose or 60mg daily for 8 days) cause a single small (mean 16%) increase in the maximum concentration of Olanzapine and a small (mean 16%) decrease in Olanzapine clearance. *Fluvoxamine:* Fluvoxamine, a CYP1A2 inhibitor, decreases the clearance of Olanzapine. This results in a mean increase in Olanzapine C<sub>max</sub> following fluvoxamine of 54% in female nonsmokers and 77% in male smokers. The mean increase in Olanzapine AUC is 52% and 108% respectively. *Warfarin:* Warfarin (20mg single dose) did not affect Olanzapine pharmacokinetics. *Effects of Olanzapine on other drugs:* Olanzapine has little potential to inhibit CYP1A2, CYP2C9, CYP2C19, CYP2D6 and CYP3A. Thus Olanzapine is unlikely to cause clinically important drug interaction mediated by these enzymes. *Lithium:* Multiple doses of Olanzapine (10mg for 8 days) did not influence the kinetics of lithium. Therefore, concomitant Olanzapine administration does not require dosage adjustment of lithium. *Valproate:* Concomitant Olanzapine administration does not require dosage adjustment of valproate. Single doses of Olanzapine did not affect the pharmacokinetics of imipramine or its active metabolite desipramine, and warfarin. Multiple doses of Olanzapine did not influence the kinetics of diazepam and its active metabolite N-desmethyldiazepam, ethanol or biperiden. However the co-administration of either diazepam or ethanol with Olanzapine potentiated the orthostatic hypotension observed with Olanzapine. Multiple doses of Olanzapine did not affect the pharmacokinetics of theophylline or its metabolites.

**WARNING:** General: *Heodynamic Effects:* Olanzapine may induce orthostatic hypotension associated with dizziness, tachycardia and in some patients syncope, especially during the initial dose-titration period, probably reflecting its alpha adrenergic

antagonistic properties. *Seizures:* Olanzapine should be used cautiously in patients with history seizures or with condition that potentially lower the seizure threshold, e.g., Alzheimer's dementia. *Hyperprolactinemia:* As with other drugs that antagonize dopamine D<sub>2</sub> receptors, Olanzapine elevates prolactin levels and a modest elevation persist during chronic administration. *Transaminase Elevations:* Caution should be exercised in patient with signs of symptoms of hepatic impairment, in patients with pre-existing conditions associated with limited hepatic function reserves, and in patient who are being treated with potentially hepatotoxic drugs.

*Potential for cognitive and motor impairment:* Since Olanzapine has the potential to impair judgment, thinking, or motor skills, patients should be cautioned about operating hazardous machinery, including automobiles, until they are reasonably certain that Olanzapine therapy does not affect them adversely. *Body Temperature Regulations:* Disruption of the body's ability to reduce core body temperature has been attributed to antipsychotic agents. *Dysphagia, Esophageal dysmotility and aspiration* have been associated with antipsychotic drugs use. *Suicide:* The possibility of a suicide attempt is inherent in schizophrenia and in bipolar disorder and close supervision of high-risk patients should accompany drug therapy. *Increased Mortality in Elderly Patient with Dementia-Related Psychosis:* Elderly patient with dementia related psychosis treated with antipsychotic drug are at an increase risk of death. Olanzapine is not approved for the treatment of patients with dementia-related psychosis. *Pregnancy:* The drug should be used during pregnancy only if the potential justifies the potential risk to the fetus. *Nursing mothers:* It is recommended that women receiving Olanzapine should not breast-feed. *Pediatric Use:* safety and effectiveness in pediatric patient have not been established.

**DOSE AND ADMINISTRATION:**

*Schizophrenia:* Lepinza Tablets should be administered on a once-a-day schedule without regard to meals, generally beginning with 5 to 10mg initially, with a target dose of 10mg/day with several days. Further dosage adjustments for approximately 1 week in the typical patient. When dosage adjustments, are necessary, dose increment/decrements of 5mg QD are recommended. The recommended starting dosing 5mg in patients who are debilitated, who have a predisposition to hypertensive reactions, who otherwise exhibit a combination of factors that may result in slower metabolism of Olanzapine (e.g. nonsmoking female patient 65 years of age) or who may be more pharmacodynamically sensitive to Olanzapine. When indicated, dose escalation should be performed with caution in these patients. *Bipolar disorder: Monotherapy:* Lepinza Tablets should be administered on a once a day schedule without regard to meals, generally beginning with 10 or 15mg. Dosage adjustments, if indicated, should generally occur at intervals of not less than 24 hours. When dosage adjustments are necessary, dose increment/decrements of 5mg QD are recommended. *Maintenance monotherapy:* The usual maintenance dose for bipolar patients on monotherapy with Lepinza tablets is 5 to 20mg / day. The physician who elects to use Lepinza tablet for extended period should periodically re-evaluated the long term usefulness of the drug of the individual patient. *Combination therapy with lithium or valproate:* When administered in combination with lithium or valproate, dosing of Lepinza tablets should generally be with 10mg once a day without regard to meals.

Special instruction to the physician: