Quiet®

Quetiapine Tablet

Presentation

Quiet® 25: Each film coated tablet contains Quetiapine Fumarate USP equivalent to Quetiapine 25 mg.
Quiet® 50 XR: Each extended release tablet contains Quetiapine Fumarate USP equivalent to Quetiapine 50 mg.
Quiet®100: Each film coated tablet contains Quetiapine Fumarate USP equivalent to Quetiapine 100 mg.
Quiet® 200 XR: Each extended release tablet contains Quetiapine Fumarate USP equivalent to Quetiapine 200 mg.
Quiet® 300 XR: Each extended release tablet contains Quetiapine Fumarate USP equivalent to Quetiapine 300 mg.
Quiet® 400 XR: Each extended release tablet contains Quetiapine Fumarate USP equivalent to Quetiapine 400 mg.

Description

Quetiapine Fumarate is an atypical psychotropic agent belonging to a chemical class, the dibenzothiazepine derivatives. Quetiapine is an antagonist at multiple neurotransmitter receptors in the brain: serotonin $5HT_{1A}$ and $5HT_2$, dopamine D_1 and D_2, histamine H_1, and adrenergic α_1 and α_2 receptors. Quetiapine has no appreciable affinity at cholinergic muscarinic and benzodiazepine receptors. The mechanism of action of Quetiapine is unknown. However, it has been proposed that this drug's efficacy in schizophrenia is mediated through a combination of dopamine D_2 and serotonin $5HT_2$ antagonism. Quetiapine's antagonism of histamine H_1 receptors may explain the somnolence and that of adrenergic α_1 receptors may explain the orthostatic hypotension observed with this drug. Elimination of Quetiapine is mainly via hepatic metabolism with a mean terminal half-life of about 6 hours. Steady-state concentrations are expected to be achieved within two days of dosing. Quetiapine is unlikely to interfere with the metabolism of drugs metabolized by cytochrome P450 enzymes. Quetiapine Fumarate is rapidly absorbed after oral administration, reaching peak plasma concentrations in 1.5 hours. The tablet formulation is 100% bioavailable relative to solution. The bioavailability of Quetiapine is marginally affected by administration with food, with C_{max} and AUC values increased by 25% and 15%, respectively. It is 83% bound to plasma proteins at therapeutic concentrations. Following a single oral dose less than 1% of the administered dose is excreted as unchanged drug. Approximately 73% and 20% of the doses were recovered in the urine and feces, respectively. Quetiapine is extensively metabolized by the liver.

Indications and Uses

Bipolar Mania: Quetiapine is indicated for the treatment of acute manic episodes associated with bipolar disorder, as either monotherapy or adjunct therapy to lithium or divalproex.
Schizophrenia: Quetiapine is indicated for the treatment of schizophrenia. Physician who elects to use Quetiapine for extended periods should periodically re-evaluate the long-term usefulness of the drug for the individual patient.

Dosage and Administration

Recommended dosing for Quetiapine: Quetiapine can be taken with or without food.
Bipolar Mania: As monotherapy or as adjunct therapy with other anti-psychotic drugs.

Days	Dosage
1st	50 mg Twice daily
2nd	100 mg Twice daily
3rd	150 mg Twice daily
4th	200 mg Twice daily
5th	300 mg Twice daily
6th	400 mg Twice daily

Data indicates that the majority of patients responded between 400 to 800 mg/day. The safety of doses above 800 mg/day has not been evaluated in clinical trials.
Schizophrenia
Usual Dose: Quetiapine should generally be administered with an initial dose of 25 mg bid, with increments of 25-50 mg bid or tid on the second and third day, as tolerated, to a target dose range of 300 to 400 mg daily by the fourth day, given bid or tid. Further dosage adjustments, if indicated, should generally occur at intervals of not less than 2 days, as steady-state for Quetiapine would not be achieved for approximately 1-2 days in the typical patient. When dosage adjustments are necessary, dose increments/decrements of 25-50 mg bid are recommended. Most efficacy data with Quetiapine were obtained using tid regimens, but in one controlled trial 225 mg bid was also effective.
Recommended dosing for Quetiapine XR: Quetiapine XR tablets should be swallowed whole and not split, chew or crushed. It should be taken without food or with a light meal (approximately 300 calories). It should be administered once daily, preferably in the evening.

Indication	Initial dose and titration	Recommended dose
Schizophrenia-Adults	Day 1: 300 mg/day Dose increases can be made at intervals as short as 1 day and in increments of up to 300 mg/day	400-800 mg/day
Schizophrenia-Adolescents (13 to 17 years)	Day 1: 50 mg/day; Day 2: 100 mg/day; Day 3: 200 mg/day; Day 4: 300 mg/day; Day 5: 400 mg/day	400-800 mg/day
Bipolar Mania- Acute monotherapy or as an adjunct to Lithium or Divalproex	Day 1: 300 mg/day; Day 2: 600 mg/day; Day 3: 400-800 mg/day	400-800 mg/day
Depressive Episodes Associated with Bipolar Disorder	Day 1: 50 mg/day; Day 2: 100 mg/day; Day 3: 200 mg/day; Day 4: 300 mg/day	300 mg/day
Major Depressive Disorder, Adjunctive Therapy with Antidepressants	Day 1 & 2: 50 mg/day Day 3 & 4: 150 mg/day	150-300 mg/day

Geriatric Use: Consider a lower starting dose (50 mg/day), slower titration and careful monitoring during the initial dosing period in elderly.
Hepatic Impairment: Lower starting dose (50 mg/day) and slower titration may be needed.

Side-effects

Somnolence, dizziness, dry mouth, constipation, dyspepsia, postural hypotension, elevated ALT (SGPT) levels, weight gain.

Precautions

Neuroleptic malignant syndrome, tardive dyskinesia. Hypotension and syncope, especially during the initial dose titration period. Conduct eye examinations prior to or shortly after starting Quetiapine and at 6-month intervals thereafter; discontinue the drug if clinically significant lens changes are observed. History of seizures. Hypothyroidism. Hyperprolactinemia. Antiemetic effect. Suicide. Use with great caution in moderate or severe hepatic impairments. Renal impairment, cardiovascular disease. Disruption of body temperature regulation. Hyperglycemia. Lactation (avoid breast-feeding).

Contraindications

Quetiapine is contraindicated in individuals with a known hypersensitivity to this medication or any of its ingredients.

Use in Pregnancy and Lactation

Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women and Quetiapine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Nursing Mothers: It is recommended that women receiving Quetiapine should not breast feed.
Pediatric Use: The safety and effectiveness of Quetiapine in pediatric patients less than 13 years with schizophrenia, less than 10 years with bipolar mania and less than 18 years for bipolar depression have not been established.

Drug Interactions

May enhance the effects of other centrally acting drugs, certain antihypertensive agents; may antagonize the effects of dopamine agonists and levodopa. Increased clearance of Quetiapine by phenytoin, barbiturates, rifampin, carbamazepine. Increased concentrations of Quetiapine with azole antifungals and macrolide antibiotics.

Storage

Do not store above 30^0 C. Keep away from light and out of the reach of children.

Commercial Pack

Quiet® 25: Each box contains 5 blister strips of 10 tablets.
Quiet® 50 XR: Each box contains 5 blister strips of 10 tablets.
Quiet® 100: Each box contains 5 blister strips of 10 tablets.
Quiet® 200 XR: Each box contains 3 blister strips of 10 tablets.
Quiet® 300 XR: Each box contains 2 blister strips of 10 tablets.
Quiet® 400 XR: Each box contains 2 blister strips of 10 tablets.

Manufactured by
Incepta Pharmaceuticals Ltd
Savar, Dhaka, Bangladesh

QTX V.N.01