MOLINDONE

THEAPEUTICS

**Brands** • Moban
*see index for additional brand names*

**Generic?** Yes

**Class**
- Conventional antipsychotic (neuroleptic, dopamine 2 antagonist)

**Commonly Prescribed for**
*bold for FDA approved*
- Schizophrenia (no longer available in the USA)
- Other psychotic disorders
- Bipolar disorder

**How the Drug Works**
- Blocks dopamine 2 receptors, reducing positive symptoms of psychosis

**How Long Until It Works**
- Psychotic symptoms can improve within 1 week, but it may take several weeks for full effect on behavior

**If It Works**
- Most often reduces positive symptoms in schizophrenia but does not eliminate them
- Most schizophrenic patients do not have a total remission of symptoms but rather a reduction of symptoms by about a third
- Continue treatment in schizophrenia until reaching a plateau of improvement
- After reaching a satisfactory plateau, continue treatment for at least a year after first episode of psychosis in schizophrenia
- For second and subsequent episodes of psychosis in schizophrenia, treatment may need to be indefinite
- Reduces symptoms of acute psychotic mania but not proven as a mood stabilizer or as an effective maintenance treatment in bipolar disorder
- After reducing acute psychotic symptoms in mania, switch to a mood stabilizer and/ or an atypical antipsychotic for mood stabilization and maintenance

**If It Doesn’t Work**
- Consider trying one of the first-line atypical antipsychotics (risperidone, olanzapine, quetiapine, ziprasidone, aripiprazole, paliperidone, asenapine, iloperidone, lurasidone, amisulpride)
- Consider trying another conventional antipsychotic
- If 2 or more antipsychotic monotherapies do not work, consider clozapine

**Best Augmenting Combos for Partial Response or Treatment Resistance**
- Augmentation of conventional antipsychotics has not been systematically studied
- Addition of a mood-stabilizing anticonvulsant such as valproate, carbamazepine, or lamotrigine may be helpful in both schizophrenia and bipolar mania
- Augmentation with lithium in bipolar mania may be helpful
- Addition of a benzodiazepine, especially short-term for agitation

**Tests**
- Since conventional antipsychotics are frequently associated with weight gain, before starting treatment, weigh all patients and determine if the patient is already overweight (BMI 25.0–29.9) or obese (BMI ≥30)
- Before giving a drug that can cause weight gain to an overweight or obese patient, consider determining whether the patient already has pre-diabetes (fasting plasma glucose 100–125 mg/dL), diabetes (fasting plasma glucose >126 mg/dL), or dyslipidemia (increased total cholesterol, LDL cholesterol, and triglycerides; decreased HDL cholesterol), and treat or refer such patients for treatment, including nutrition and weight management, physical activity counseling, smoking cessation, and medical management
- Monitor weight and BMI during treatment
- Consider monitoring fasting triglycerides monthly for several months in patients at high risk for metabolic complications and when initiating or switching antipsychotics
- While giving a drug to a patient who has gained >5% of initial weight, consider evaluating for the presence of pre-diabetes, diabetes, or dyslipidemia, or consider switching to a different antipsychotic
- Should check blood pressure in the elderly before starting and for the first few weeks of treatment
SIDE EFFECTS

How Drug Causes Side Effects
- By blocking dopamine 2 receptors in the striatum, it can cause motor side effects
- By blocking dopamine 2 receptors in the pituitary, it can cause elevations in prolactin
- By blocking dopamine 2 receptors excessively in the mesocortical and mesolimbic dopamine pathways, especially at high doses, it can cause worsening of negative and cognitive symptoms (neuroleptic-induced deficit syndrome)
- Anticholinergic actions may cause sedation, blurred vision, constipation, dry mouth
- Antihistaminic actions may cause sedation, weight gain
- By blocking alpha 1 adrenergic receptors, it can cause dizziness, sedation, and hypotension
- Mechanism of weight gain and any possible increased incidence of diabetes or dyslipidemia with conventional antipsychotics is unknown

Notable Side Effects
- Neuroleptic-induced deficit syndrome
- Akathisia
- Extrapyramidal symptoms, parkinsonism, tardive dyskinesia
- Galactorrhea, amenorrhea
- Sedation
- Dry mouth, constipation, vision disturbance, urinary retention
- Hypotension, tachycardia

Life-Threatening or Dangerous Side Effects
- Rare neuroleptic malignant syndrome
- Rare leukopenia
- Rare seizures

Usual Dosage Range
- 40–100 mg/day in divided doses

Dosage Forms
- Tablet 5 mg, 10 mg, 25 mg scored, 50 mg scored, 100 mg scored
- Liquid 20 mg/mL

How to Dose
- Initial 50–75 mg/day; increase to 100 mg/day after 3–4 days; maximum 225 mg/day
Other Warnings/Precautions

- If signs of neuroleptic malignant syndrome develop, treatment should be immediately discontinued
- Liquid molindone contains sodium metabisulfite, which may cause allergic reactions in some people, especially in asthmatic people
- Use cautiously in patients with alcohol withdrawal or convulsive disorders because of possible lowering of seizure threshold
- Antiemetic effect can mask signs of other disorders or overdose
- Do not use epinephrine in event of overdose as interaction with some pressor agents may lower blood pressure
- Use cautiously in patients with glaucoma, urinary retention
- Observe for signs of ocular toxicity (pigmentary retinopathy, lenticular pigmentation)
- Use only with caution if at all in Parkinson’s disease or Lewy body dementia

Do Not Use

- If patient is in a comatose state or has CNS depression
- If there is a proven allergy to molindone

Pharmacokinetics

- Half-life approximately 1.5 hours

Drug Interactions

- Additive effects may occur if used with CNS depressants
- Some patients taking a neuroleptic and lithium have developed an encephalopathic syndrome similar to neuroleptic malignant syndrome
- Molindone tablets contain calcium sulfate, which may interfere with absorption of phenytoin sodium or tetracyclines
- Combined use with epinephrine may lower blood pressure
- May increase the effects of antihypertensive drugs

SPECIAL POPULATIONS

Renal Impairment

- Should receive initial lower dose

Hepatic Impairment

- Should receive initial lower dose

Cardiac Impairment

- Use with caution

Elderly

- Should receive initial lower dose
- Although conventional antipsychotics are commonly used for behavioral disturbances in dementia, no agent has been approved for treatment of elderly patients with dementia-related psychosis
- Elderly patients with dementia-related psychosis treated with antipsychotics are at an increased risk of death compared to placebo, and also have an increased risk of cerebrovascular events
Suggested Reading
