



# Bipolar

*treatments*

# introduction

A brief review of evidence based treatments for Bipolar I, Bipolar II, and Cyclothymia in acute and long term setting.

According to the DSM-5, bipolar and related disorders are characterized by distinct periods of abnormally elevated, expansive, or irritable mood accompanied by changes in activity or energy levels.

These mood episodes include:

- Manic episodes
- Hypomanic episodes
- Major depressive episodes

Key feature:

The disorder involves episodic mood disturbances with periods of remission between episodes.

Estimated lifetime prevalence:

- Bipolar I: ~1%
- Bipolar II: ~1-2%

Typical age of onset:

- Late adolescence to early adulthood

# Treatment

## Lithium

Lithium remains the gold standard mood stabilizer for bipolar disorder.

Mechanism of action (not fully understood):

- modulation of dopamine and glutamate neurotransmission
- inhibition of glycogen synthase kinase-3 (GSK-3)
- stabilization of intracellular signaling pathways

Clinical benefits:

- effective for acute mania
- effective for maintenance therapy
- significantly reduces suicide risk

Therapeutic serum range:

- 0.6–1.2 mEq/L

Monitoring:

- renal function
- thyroid function
- lithium serum levels

Common side effects:

- tremor
- polyuria
- hypothyroidism
- weight gain

Serious toxicity may cause:

- confusion
- ataxia
- seizures

# Treatment

Valproate (Divalproex Sodium)

Valproate is widely used for acute manic episodes, particularly when mania presents with mixed features or rapid cycling.

Mechanism:

- increases GABAergic activity
- stabilizes neuronal firing

Monitoring includes:

- liver function tests
- platelet counts
- serum valproate levels

Common side effects:

- sedation
- weight gain
- tremor
- gastrointestinal upset

Important contraindication:

- teratogenic risk, including neural tube defects.

# Treatment

## Lamotrigine

Lamotrigine is primarily used for bipolar depression and maintenance therapy.

Mechanism:

- inhibition of voltage-sensitive sodium channels
- reduction of glutamate release

Important feature:

- particularly effective for preventing depressive relapse

Major safety consideration:

- risk of Stevens–Johnson syndrome

Therefore the medication must be titrated slowly.

# Treatment

## Atypical Antipsychotics

Second-generation antipsychotics are commonly used for mania and bipolar depression.

Examples include:

- quetiapine
- olanzapine
- risperidone
- aripiprazole
- lurasidone

Mechanism:

- dopamine D2 receptor antagonism
- serotonin 5-HT<sub>2A</sub> receptor modulation

These medications can be used:

- as monotherapy
- in combination with mood stabilizers

Common adverse effects:

- metabolic syndrome
- weight gain
- sedation
- extrapyramidal symptoms

# Treatment

## Treatments Acute Mood Episodes

### Acute Mania

First-line pharmacologic options include:

- lithium
- valproate
- atypical antipsychotics

Combination therapy is frequently used in severe mania or when psychotic features are present.

Patients experiencing severe mania may require:

- psychiatric hospitalization
- close monitoring for safety

# Treatment

## Bipolar Depression

Treatment of bipolar depression is often more challenging.

First-line agents include:

- quetiapine
- lurasidone
- lithium
- lamotrigine

Important clinical principle:

Antidepressant monotherapy is generally avoided in bipolar disorder.

Reason:

Antidepressants may precipitate:

- manic episodes
- rapid cycling

If antidepressants are used, they are typically combined with a mood stabilizer.

# Treatment

## Quetiapine Treats Multiple Phases of Bipolar Disorder

One major advantage is that quetiapine works for several DSM-5 mood episodes.

It is effective for:

- Acute mania
- Bipolar depression
- Maintenance treatment

Lithium is excellent for mania and maintenance, but less effective for bipolar depression.

So quetiapine can sometimes cover more phases with one medication.

Quetiapine often produces rapid sedation and calming effects.

For patients with:

- agitation
- insomnia
- racing thoughts

it can provide relief within hours to days, whereas lithium may take several days to weeks to fully stabilize

## No Blood Monitoring Required

Lithium requires frequent monitoring because it has a narrow therapeutic window.

Patients need regular checks of:

- lithium levels
- kidney function
- thyroid function

Some patients prefer quetiapine because no serum drug levels are required.

# Maintenance Treatment and Psychosocial Management

Long-term treatment is necessary because bipolar disorder is a recurrent illness.

Maintenance therapy aims to:

- prevent relapse
- reduce episode frequency
- improve functional outcomes

Common maintenance medications include:

- lithium
- valproate
- lamotrigine
- quetiapine

Among these, lithium has the strongest evidence for relapse prevention and suicide reduction.

# Maintenance Treatment and Psychosocial Management

## Psychotherapy

Psychosocial interventions are important adjuncts to pharmacologic treatment.

Evidence-based therapies include:

Cognitive Behavioral Therapy (CBT)

Helps patients identify maladaptive thought patterns and recognize early symptoms of mood episodes.

Family-Focused Therapy

Improves communication and reduces family-related stressors.

Interpersonal and Social Rhythm Therapy

Focuses on stabilizing daily routines and sleep patterns, which are crucial in bipolar disorder.

# Maintenance Treatment and Psychosocial Management

## Lifestyle Interventions

Patients are advised to maintain:

- regular sleep cycles
- consistent daily routines
- avoidance of alcohol or substance misuse

Sleep deprivation is a common trigger for manic episodes.

## Comparison of Major Bipolar Medications

Medication	Main Clinical Use	Mechanism	Advantages	Key Risks / Monitoring
<b>Lithium</b>	Acute mania, maintenance, Suicide prevention	Modulates dopamine & Inhibits GSK-3	Gold standard mood stabilizer	Monitor lithium levels, Kidney & thyroid function
<b>Valproate</b>	Acute mania, Mixed episodes	Increases GABA, Reduces excitability	Good for rapid cycling	Liver toxicity, Weight gain
<b>Lamotrigine</b>	Bipolar depression, Maintenance	Blocks sodium channels, Reduces glutamate	Prevents depressive relapse	Risk of SJS rash, Slow titration
<b>Quetiapine</b>	Mania, Bipolar depression	Dopamine & 5-HT2A Antagonist	Treats mania & depression	Sedation, Weight gain

## Treatment Based on Bipolar Episode

Mood Episode (DSM-5)	Common First-Line Treatments
<b>Acute Mania</b>	<u>Lithium, Valproate, Quetiapine, Risperidone, Aripiprazole</u> <i>Combination therapy for severe cases</i>
<b>Bipolar Depression</b>	<u>Quetiapine, Lurasidone, Lithium, Lamotrigine</u> <i>Antidepressants with mood stabilizer</i>
<b>Maintenance Treatment</b>	<u>Lithium, Lamotrigine, Valproate, Quetiapine</u> <i>Focus on relapse prevention</i>