

Litmon[®]

Lithium carbonate




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Medicinal product
Litmon® 300 mg Scored-Tablet

Pharmacologic Category
Antimanic Agent

Therapeutic indications

Bipolar disorder: Acute treatment of manic episodes and maintenance therapy for patients with a diagnosis of bipolar disorder.

Use: Off-Label

Bipolar depression; Depression, augmentation of antidepressant

Mechanism of Action

The precise mechanism of action in mood disorders is unknown. Traditionally thought to alter cation transport across cell membranes in nerve and muscle cells, influence the reuptake of serotonin and/or norepinephrine, and inhibit second messenger systems involving the phosphatidylinositol cycle. May also provide neuroprotective effects by increasing glutamate clearance, inhibiting apoptotic glycogen synthase kinase activity, increasing the levels of antiapoptotic protein Bcl-2, and, enhancing the expression of neurotrophic factors, including brain-derived neurotrophic factor.

Dosing

Note: Monitor serum concentrations and clinical response (efficacy and toxicity) to determine the proper dose. Each 5 mL of lithium citrate oral solution contains 8 mEq of lithium-ion, equivalent to the amount of lithium in 300 mg of lithium carbonate immediate-release capsules/tablets

Bipolar disorder (acute mania, acute depression [off-label use], and maintenance): Oral:

Initial: Initiate at a low dose (eg, 300 mg 3 times daily or less); increase gradually based on response and tolerability; usual dosage: 900 to 1,800 mg/day in 3 to 4 divided doses

Depression, augmentation of antidepressant (off-label use): Oral: Initial: Initiate at a low dose (eg, 300 mg once daily or 300 mg twice daily); increase gradually based on response and tolerability; usual dosage: 600 to 1200 mg daily in divided doses

Administration

Administer with meals to decrease GI upset. do not crush or chew. When tolerated, lithium dosage may be consolidated to a single dose given at bedtime.

Contraindications

Hypersensitivity to lithium or any component of the formulation

Severe cardiovascular or renal disease, severe debilitation, dehydration, sodium depletion, concurrent use with diuretics

Interaction

Lithium major drug interaction:

- SSRIs, which increase serotonergic activity and can cause serotonin syndrome.
- Aldactone, which reduces renal clearance of lithium and can cause toxic levels of lithium in the blood.
- Bupropion, which increases the risk of seizures when combined with lithium.
- ACE inhibitors and angiotensin II receptor antagonists, which can increase lithium serum concentrations and increase the chance of toxicity.
- Diuretics, which can affect lithium concentrations and require careful monitoring.

Pregnancy and breast-feeding

Pregnancy Risk Factor: **D**

Due to pregnancy-induced physiologic changes, women who are pregnant may require dose adjustments of lithium to achieve euthymia and avoid toxicity

Recommended not to breastfeed while taking lithium

Monitoring Parameters

Renal functions including BUN and SrCr, serum electrolytes, serum calcium, thyroid function, ECG with rhythm strip with differential, serum lithium, weight

References

- 1 <https://www.uptodate.com>
- 2 <https://www.medicines.org.uk>
- 3 <https://www.drugs.com>