

Image: ©tamayura39 - stock.adobe.com

BIPOLAR DISORDERS Factsheet

October 2021

What is lithium?

Lithium has become a mainstay of treatment for bipolar disorders. It has been recommended for both the treatment of acute mania and for the augmentation of antidepressants in depression.

What is the evidence for lithium as a treatment for bipolar disorder?

Symptoms;

Moderate to high quality evidence finds medium-sized effects of greater improvement in acute mania symptoms with lithium than with placebo or topiramate, although there was a large effect of greater improvement in acute mania symptoms with tamoxifen than with lithium. No benefit was found for depression severity or for response to treatment for lithium over placebo or quetiapine, and no differences between groups were found for rates of switching to mania. Lithium was more likely than placebo to cause tremor and somnolence.

Moderate quality evidence finds small to medium-sized effects for the following predictors of lithium response (in order of descending effect size): a mania-depression sequence rather than a depression-mania sequence, no rapid cycling, having a family history of bipolar disorder, low body mass index, no psychotic symptoms, fewer mood episodes prior to lithium treatment, shorter prelithium illness duration, and later age of onset of bipolar disorder. Having a family history of lithium response and fewer hospitalisations prior to lithium treatment may also predict lithium response.

Relapse prevention;

Moderate quality evidence finds the recurrence of any mood episode is 39.8%, the recurrence of a depressive episode is 25.6%, and the recurrence of manic/hypomanic or mixed episodes is 18.5% with maintenance treatment. Moderate to high quality evidence finds a small to medium-sized benefit of lithium for preventing relapse to mania when compared to placebo, carbamazepine, lamotrigine, or valproate. There may also be some benefit for preventing relapse to depression when lithium is compared to placebo. Moderate quality evidence finds lithium + valproate, lithium + imipramine, or lithium + oxcarbazepine is more effective than placebo for any relapse prevention. There were fewer relapses with lithium with or without additional valproate or oxcarbazepine than with imipramine.

Other outcomes;

Moderate quality evidence finds a small association between increased lithium levels in drinking water and reduced suicide and psychiatric hospitalization rates. Moderate to high quality evidence finds self-harm was reduced with lithium compared to placebo or carbamazepine, with no differences in self-harm when compared to lamotrigine, olanzapine, divalproex, or quetiapine.

Lithium use during pregnancy was associated with small increased risks of any congenital anomaly, cardiac congenital anomalies, and a medium increased risk of more spontaneous abortion compared to no lithium use in any psychiatric disorder. Note that the findings for cardiac congenital anomalies and spontaneous abortion were not significant when lithium use in bipolar patients was compared to no lithium use only in bipolar patients. There were no increased risks of preterm birth or low birth weight.

There was less weight gain with lithium than with antipsychotics or other mood stabilisers, and no differences in weight pre-post treatment with lithium. However, Lithium may cause tremor and somnolence and increased serum creatinine levels. Placebo was better tolerated than lithium or lithium + valproate.

For more information see the technical table



NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about bipolar disorder or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au.