**Clozapine in bipolar disorder: A systematic review and meta-analysis**

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**Abstract**

**Objectives**

To assess the clinical efficacy of [clozapine](https://www.sciencedirect.com/topics/medicine-and-dentistry/clozapine) in [bipolar disorder](https://www.sciencedirect.com/topics/medicine-and-dentistry/bipolar-disorder) and its [adverse effect](https://www.sciencedirect.com/topics/neuroscience/adverse-effect) profile.

**Methods**

A literature search with no year and no language restriction was conducted. The search yielded 3858 articles, with 2453 remaining after duplicate removal; 9 were suitable for the [systematic review](https://www.sciencedirect.com/topics/medicine-and-dentistry/systematic-review). From the 9 included studies, 3 (100 patients treated with clozapine and 102 patients treated with other antipsychotics) could be included in a meta-analysis to test clozapine efficacy in the [treatment](https://www.sciencedirect.com/topics/medicine-and-dentistry/therapeutic-procedure) of [manic episodes](https://www.sciencedirect.com/topics/neuroscience/mania).

**Results**

Clozapine's efficacy was similar to other [antipsychotics](https://www.sciencedirect.com/topics/medicine-and-dentistry/typical-antipsychotic) (Mean difference (MD): 0.03 [95%CI: 0.86-0.92], p = 0.59) in manic episodes. The systematic review also suggested that clozapine is faster at improving symptoms in manic episodes. In addition, two studies included patients with treatment resistant bipolar disorder (TRBD) and showed that clozapine is superior to other treatments for this specific population. Sedation was the most frequent side effect (49.6%), followed by constipation (31.8%) and [tachycardia](https://www.sciencedirect.com/topics/medicine-and-dentistry/tachyarrhythmia) (23.2%).

**Conclusion**

Clozapine's efficacy was similar to other antipsychotics in manic episodes and is superior to other antipsychotics among TRBD patients.

 [Previous article in issue](https://www.sciencedirect.com/science/article/pii/S0022395619313792)

 [Next article in issue](https://www.sciencedirect.com/science/article/pii/S002239561931235X)

**Keywords**

Clozapine

Bipolar disorder

Efficacy

Side effects

Clinical symptoms

Antipsychotics

**Cited by (24)**

* [**Mapping the scientific research on bipolar disorder: A scientometric study of hotspots, bursts, and trends**](https://www.sciencedirect.com/science/article/pii/S0165032723010479)

2023, Journal of Affective Disorders

** ** [**Pharmacotherapy exposure as a marker of disease complexity in bipolar disorder: Associations with clinical &amp; genetic risk factors**](https://www.sciencedirect.com/science/article/pii/S0165178123001257)

2023, Psychiatry Research

** ** [**Discovery of dilated cardiomyopathy in a schizophrenic patient treated with clozapine**](https://www.sciencedirect.com/science/article/pii/S2772953222001101)

2023, Pharmacien Clinicien

** ** [**Real-world effectiveness of pharmacological treatments for bipolar disorder: Register-based national cohort study**](https://doi.org/10.1192/bjp.2023.75)

 2023, British Journal of Psychiatry

**** [**Safety aspects during treatment with clozapine:: Adverse effects, titration, and therapeutic drug monitoring – a narrative review**](https://doi.org/10.1007/s40211-023-00474-z)

 2023, Neuropsychiatrie

**** [**Clozapine but not lithium reverses aberrant tyrosine uptake in patients with bipolar disorder**](https://doi.org/10.1007/s00213-023-06397-5)

* 2023, Psychopharmacology

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