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COMPARATIVE EFFICACY OF LITHIUM AND ANTICONVULSANTS IN BIPOLAR DISORDER MANAGEMENT

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Abstract

Background: Bipolar disorder BD causes recurring episodes of mania and depressive phases in patients. While Lithium is a common drug of choice to treat manic disorders, physicians also prescribe anticonvulsants such as valproic acid and Lamotrigine. Since the effectiveness of Lithium and anticonvulsants differs, comparing their efficacy helps clinicians make better treatment choices.

Aim: A research study performs a systematic evaluation of how well lithium-based medications function against anticonvulsants consisting of valproic acid and Lamotrigine for bipolar disorder management. This review performed a thematic analysis to combine study findings by comparing these treatment methods.

Method: Systematic review analysis included evaluating research conducted between 2015 and 2024. The authors used randomized controlled trials (RCTs) and observational studies in PubMed, Cochrane Library, Scopus, and PsycINFO databases. The research focused on extracting significant topics related to therapy success, recurrence prevention, and adverse effects from different studies through thematic data analysis.

Result: The research investigation uncovered three main discoveries, which showed that (1) Lithium works for manic episode prevention, (2) anticonvulsants control depressive symptoms, and (3) side effects create challenges for treatment adherence.

Conclusion: Clinicians consider Lithium as the leading medication to stop manic flare-ups and prevent relapses, yet Lamotrigine works best against depression symptoms. Therefore, clinicians must reevaluate treatment choices from case to case, depending on how well patients accept treatments and their anticipated side effects.

Introduction

Bipolar disorder is a chronic and severe psychiatric condition that causes repeated manic, hypomanic, and depressive episodes (McIntyre et al., 2020). The recurrent nature of this condition affects about one to two percent of people worldwide, creating major disruptions to both personal and social functioning and interpersonal connections (Marx et al., 2023). Current treatments for bipolar disorder primarily involve medication, with Lithium remaining the first-line therapy for acute episodes and Long-term management. Lithium, which was introduced in the 1950s, continues to demonstrate strong effectiveness in controlling manic episodes and decreasing the risk of suicide (Schäfer et al., 2022). Because of Lithium's narrow therapeutic range, it requires constant medical observation. The long-term usage of Lithium often leads to three common adverse effects, which include cognitive deterioration and weight expansion alongside thyroid gland dysfunction (Dharia, Desai & Desai, 2025). Anticonvulsants valproic acid, together with Lamotrigine, have developed as new options for mood stabilization in recent decades (Miranda et al., 2019). The medication valproic acid works best as a short-term treatment for manic episodes along with Lamotrigine, providing better prevention of depressive relapses with fewer adverse effects (Yee et al., 2021). Clinical practitioners continue to face uncertainty regarding the abilities of Lithium to perform compared to anticonvulsants because of unknown effectiveness and safety elements and long-term treatment results (Yee et al., 2021). The lack of specific comparative research prevents health professionals from making effective treatment choices. This study systematically reviews the effectiveness of Lithium compared to anticonvulsant medications in the treatment of bipolar disorder. The review investigates the therapeutic effect, relapse prevention features, and tolerability levels of these medications with the target of guiding evidence-based clinical practices in BD management.

Method

Study Design

The investigation conducted a systematic evaluation of lithium treatment against anticonvulsants valproic acid and Lamotrigine for bipolar disorder (BD). The database investigation of PubMed and Cochrane Library with Scopus yielded required randomized controlled trials (RCTs) and observational studies from 2015 to 2024. The

research examines lithium treatment effects on BD patients through performance assessments conducted against valproic acid and lamotrigine measurements. Systematic review proved to be the most effective approach for combining study data from RCTs through observational studies and extending to meta-analyses. A compilation of scientific literature enables the review to evaluate lithium treatment performance against anticonvulsants, according to Besag et al. (2021). The method works optimally to study three fundamental results, which include symptom progression besides the prevention of relapse and the side effects of medication. All studies within the reviewed research body emerged from 2015 to 2024, ensuring their modern clinical applicability. The systematic review method includes built-in bias reduction elements to provide objective analyses about treatment effectiveness, thus making it the suitable approach for determining optimal bipolar disorder treatments.

Inclusion and Exclusion Criteria

1. **Study Design**:
    - **Randomized Controlled Trials (RCTs)** and **Observational Studies** (including cohort and case-control studies) published between 2015 and 2024.
    - Studies must include **at least one of the following treatments for bipolar disorder (BD):** Lithium**,** valproic acid**, or** Lamotrigine**.**
    - Studies that directly compare the effectiveness of Lithium versus anticonvulsants (valproic acid or Lamotrigine) in patients diagnosed with bipolar disorder.
2. **Population**:
    - Adults aged 18 and above are diagnosed with bipolar disorder (BD) according to DSM-5 or ICD-10 criteria.
    - Studies that include participants in either the acute phase (mania or hypomania) or maintenance phase (relapse prevention) of bipolar disorder.
3. **Outcomes**:
    - Studies that report on primary outcomes such as symptom improvement, relapse prevention, and reduction of suicidal thoughts**.**
    - Studies report secondary outcomes such as adverse effects (e.g., cognitive impairment, weight gain, thyroid dysfunction, and others), hospitalization rates, and quality of life measures.
4. **Language**:
    - Only studies were published in Englis**h**.
5. **Study Duration**:
    - Studies with a minimum duration of 4 weeks for short-term studies and 12 weeks or more for long-term studies to assess acute and maintenance treatment effects.

Exclusion Criteria

1. **Study Design**:
    - Non-randomized studies (e.g., case reports, editorials, and expert opinions).
    - Studies that do not provide direct comparative data between Lithium and anticonvulsants (valproic acid or Lamotrigine).
2. **Population**:
    - Studies include patients with other psychiatric disorders (e.g., schizophrenia, major depressive disorder) without bipolar disorder **or** BD spectrum disorders.
    - Studies that include patients under 18 years or those diagnosed with severe comorbid medical condition**s** (e.g., liver failure, renal failure) that could influence medication efficacy or safety.
3. **Outcomes**:
    - Studies that do not report on primary clinical outcomes like symptom improvement or relapse prevention for bipolar disorder.
    - Studies that do not provide data on adverse effects or side-effect profiles associated with Lithium, valproic acid, or Lamotrigine.
4. **Language**:
    - Studies published in languages other than English.
5. **Study Duration**:
    - Studies with a shorter duration than 4 weeks do not allow for evaluating long-term treatment effects.

Data Extraction and Thematic Analysis

The study concentrated analysis on three major elements, which encompassed treatment outcomes and prevention of relapses in addition to evaluating adverse side effects when treating bipolar disorder. The three major analytical categories discovered during thematic analysis included the effectiveness of manic episode management together with depressive symptom control and comparisons between side effects and safety parameters. A systematic review followed an approach to review all evaluated studies for shared relationships and patterns between Lithium and anticonvulsant therapies utilized for bipolar disorder treatment. The thematic analysis revealed different patterns, allowing researchers to systematize the evaluation of treatment results from multiple studies (Jangid & Dixit, 2023). An analytical technique identified in this review allowed the complete assessment of lithium treatment performance and safety in comparison to anticonvulsants for bipolar disorder management. The information enables medical workers to select the correct treatment approaches for specific clinical use. The study-generated themes will assist medical practitioners in planning treatment and direct future research on bipolar disorder therapy evaluations.

Results

Theme: Lithium as the Gold Standard in Long-term Maintenance

Lithium's role as a standard treatment for Long-term bipolar disorder management helps reduce relapse rates and sustain prophylaxis. According to Kessing et al. (2018) and Airliner & Seifert (2024), Lithium outperforms other treatments because it maintains stable moods during extended maintenance periods. Lithium monotherapy proves superior to anticonvulsants (valproic acid and Lamotrigine) in achieving better results, according to observational studies conducted in real-world settings. The data confirms that Lithium continues to demonstrate superior effectiveness as a lasting preventive measure against relapse episodes for bipolar disorder patients. Research indicates that Lithium produces both mood stabilization and neuroprotective properties as well as decreased suicide thoughts and enhanced functional performance. Through its wide-ranging advantages, Lithium has emerged as the best treatment to lower suicide risks that pose a deadly threat to bipolar disorder patients. The wide range of therapeutic effects that lithium exhibits for bipolar disorder management earns its status as the primary treatment option during ongoing bipolar disorder maintenance. The neuroprotective qualities of Lithium make it the necessary medication for sustained bipolar disorder treatment. Airainer and Seifert (2024) joined Kessing et al. (2018) in demonstrating that lithium therapy protects brain structures and its well-known symptom-controlling properties. The ability of Lithium to preserve gray matter regions and maintain neuron structure serves as an essential protection against cognitive decline that can develop in bipolar disorder patients with long-term illness. Research demonstrates Lithium reduces suicidal ideation and behavior effectively, whereas other medications do not have equivalent proven efficacy in preventing such occurrences in bipolar disorder patients. The neuroprotective nature and life-saving properties of Lithium play an essential role in treating bipolar disorder, according to Kessing et al. (2018), because it prevents mood episode recurrences over time and stabilizes mental health. The drug stands alone because it offers comprehensive management throughout the different aspects of the disorder, thus making it the superior choice in clinical practice.

Theme: Efficacy of Anticonvulsants in Acute and Maintenance Phases

The treatment of bipolar disorder patients includes antidepressant medications and valproic acid together with Lamotrigine to control acute manic episodes and stabilize mood patterns. Chen et al. (2022) established that valproic acid effectively protects against mood relapse when serum levels are maintained between 50–74 mg/ml due to dosage dependencies during maintenance therapy. The clinical effectiveness of preventing relapses in bipolar disorder patients improves when dosages are readjusted because patients who have serum concentrations below 50 mg/ml demonstrate limited therapeutic benefits. Lamotrigine displays robust effectiveness for preventing depressive episodes yet establishes less success in stabilizing mood and preventing relapse when compared to long-term lithium treatment. The medical community provides recommendations regarding carbamazepine use; however, the drug performs worse than lithium treatment at every phase of bipolar disorder management. Anticonvulsants assist during acute periods even though they may neither deliver the best nor suitable treatment for every situation. These drugs function as backup remedies when patients require additional medicine or when Lithium does not work for them. Valproic acid and Lamotrigine show success in particular bipolar disorder aspects, but their sustained effectiveness falls shorter than lithium treatment success rates. Patients who receive valproic acid tend to benefit most during acute manic episodes when healthcare providers achieve adequate serum level ranges of 50–74 mg/ml, which helps the medicine stabilize moods quickly. The effectiveness of valproic acid weakens when serum levels fall below 50 mg/ml, according to Chen et al. (2022), resulting in elevated relapse risks for the patients. Lamotrigine demonstrates significant advantages in depressive episode prevention because it delivers better treatment of the depressive phase compared to Lithium. The stability of mood and prevention of relapses that Lamotrigine offers to patients is not as

adequate as Lithium's long-term benefits, making it not suitable for full-spectrum bipolar disorder standalone therapy. The medical recommendation of Carbamazepine does not match Lithium's clinical performance in the acute treatment phase and continues to be less effective in maintenance therapy. Anticonvulsants still represent a valid treatment choice for patients who need additional medication after lithium therapy or as an alternative to Lithium when it is not tolerated well. Anticonvulsants function as necessary supplementary treatments within biomedical management approaches to bipolar disorder.

Theme: Limitations and Variability of Efficacy in Anticonvulsants

Patients show different responses to anticonvulsants when treating bipolar disorder because treatment outcomes vary between individuals. The anticonvulsant drugs valproic acid and Lamotrigine exhibit higher interindividual differences in their therapeutic results than Lithium, according to Hsu et al. (2022). Acute mania treatment shows apparent differences between Lithium risperidone and other antipsychotic medications regarding their treatment effectiveness. Antipsychotics, together with lithium agents, demonstrate lower variation ratios so that patients can expect more consistent effects during manic episode treatment. Anticonvulsant response patterns that healthcare providers cannot predict result in clinical practice treatment results that vary between patients. The unpredictable nature of anticonvulsant behaviors creates difficulties when trying to establish their position as primary medications for bipolar disorder. Since anticonvulsant effects vary widely, physicians most often use these drugs as secondary agents following lithium non-response. This case underlines the awareness of the need to work on individual patient care and frequently supervise their treatment process. The patterns of bipolar disorder treatment prescription differ substantially between geographic regions, according to Lin et al. (2022) and Park et al. (2024). Many Asian nations tend to select anticonvulsants, especially valproic acid, instead of Lithium because their patients accept them better and have specific beliefs regarding the medication's adverse effects. Local drug policies, as well as patient profiles and healthcare system capabilities, affect regional preferences for bipolar disorder treatments even though international guidelines recommend Lithium as the initial treatment option. The variation in prescription approaches worsens because different medical associations develop their treatment guidelines using inconsistent methodologies, including expert opinions. Certain regions' guidelines with insufficient clinical evidence or other economic factors sometimes select anticonvulsants as their recommended treatment choice for specific patient demographics. The different standards in bipolar disorder treatment guidelines demonstrate the requirement for compound clinical evidence with standardized protocols to advance worldwide bipolar disorder treatment methods.

Theme: Polypharmacy and Adjunctive Use of Lithium and Anticonvulsants

Treatment of bipolar disorder often features Lithium because healthcare professionals, together with extensive research evidence, consistently demonstrate its best results. Medical researchers identified Lithium as a significant medical discovery after its introduction in the 1950s. Depression and manic-depressive treatment led to contemporary pharmacological advancements (López-Muñoz et al. 2018). The standard treatment status for bipolar disorder belongs to Lithium because clinical utilization data combined with early FDA clearance defined its predominant role. Science has recognized Lithium as the primary therapeutic gold standard since its launch. It demonstrated powerful effectiveness against manic episodes and depressive symptoms in addition to its secure medical profile and protection of the nervous system. The progression of pharmacological treatments has not displaced Lithium as the primary therapeutic element for bipolar disorder treatment. The continued application of Lithium as a treatment for bipolar disorder has been well supported by randomized controlled trials, which demonstrate superior effectiveness for stabilizing moods and enhancing patient well-being. The historical and scientific evidence shows why lithium treatment options remain critical for bipolar disorder therapy. Bipolar disorder treatment often employs multiple medications, also known as polypharmacy, according to Lin et al. (2022) and Loo et al. (2023). Treatment of bipolar disorder employs Lithium along with anticonvulsants for many patients, especially during severe presentations or treatment nonresponsiveness to single-drug therapy. Mixed medication treatments yield enhanced benefits yet increase the danger of medication reactions and side effects, in addition to necessitating continuous medical observation. Treatment-resistant bipolar disorder patients receive co-administration of Lithium with clozapine or valproic acid drugs. Additional treatment methods for complex bipolar disorder cases have specific monitoring challenges together with enhanced risks of adverse effects. When a person combines lithium therapy with anticonvulsants, it becomes essential to develop individual treatment plans that maintain both effectiveness and protect patient safety.

Discussion

This systematic review delivers thorough information about lithium benefits and anticonvulsant effects of valproic acid and Lamotrigine in bipolar disorder (BD) treatment. The medical community continues to view Lithium

as the top psychiatric treatment for both bipolar disorder symptom control in the short- and long-term periods. Research validates Lithium as the most effective agent for preventing future relapses and lowering suicide attempts. Kessing et al. (2018) demonstrate lithium stands as the most effective treatment for recurrent mood episodes among all pharmaceutical options, thus making it the essential medication for bipolar disorder management. The preventive properties of Lithium play a crucial role in controlling recurrent manic and depressive episodes because these conditions produce severe life quality problems for patients.

Lithium maintains clinical effectiveness in treating short-term intense manic episodes and blocking disease relapses, which leads to its ongoing use as the primary treatment for bipolar disorder (Gottlieb et al., 2019). Airainer & Seifert (2024) recommend Lithium because it serves as a core element of bipolar disorder treatment due to its ability to protect the nervous system along with reducing suicide risks. The well-established medical effectiveness of the drug faces challenges because of its restricted therapeutic range. Patients require regular monitoring for potential toxic side effects since weight gain, cognitive deficits, and thyroid dysfunction often drive them to change treatments when they need long-term medications. Valproic acid and Lamotrigine prove beneficial treatment options compared to Lithium because their use enables patients who cannot tolerate lithium treatment as well as those with distinct clinical characteristics (Carli et al., 2023). Data from Chen et al. (2022) demonstrates that valproic acid effectively controls acute mania when patient serum reaches moderate concentrations between 50–74 mg/ml because this range shows substantial protection against mood episode recurrence. Health professionals consider Lamotrigine a practical choice when addressing depressive episodes in bipolar disorder patients due to inadequate treatment at this stage. Lamotrigine remains an attractive medication for bipolar disorder patients with primary depressive symptoms because it shows minimal side effects, according to Hsu et al. (2022).

The review recognizes multiple difficulties associated with anticonvulsant therapy mainly because of patients' inconsistent medical responses. The conflicting effects of valproic acid and Lamotrigine in patients create substantial challenges because some users neither receive adequate medical benefits nor tolerate their treatment side effects well. The inconsistent results of anticonvulsant treatment during manic episodes create barriers to becoming a primary therapy option in bipolar disorder, according to Volkmann, Bschor & Köhler (2020). Treatment of bipolar disorder depends heavily on anticonvulsants such as valproic acid and Lamotrigine, but their unpredictable effectiveness shows that personalized care should become standard practice in medication administration. This review recognizes the value of polypharmacy treatments for bipolar disorder management, especially when initial treatments meet resistance. Combination regimens that blend Lithium with anticonvulsants improve efficacy. However, it may increase the adverse effects and require intense medical monitoring. When Lithium combines with valproic acid or Lamotrigine, both drugs produce interactions that require medical staff to monitor serum levels and track side effects. According to Burgess et al. (2024) and Atagün & Timuçin (2021), the benefits of combination therapy of Lithium and anticonvulsant high it also involves more complex treatments, which can pose challenges in managing patients with complicated symptoms.

Clinicians' selection of combination therapy needs an evidence-based evaluation of therapeutic advantages and possible treatment hazards. The execution of accurate medical expertise becomes essential because polypharmacy side effects create sedation, metabolic changes, and cognitive impairments that negatively impact patient compliance and long-term results (Hoel et al., 2021). Medical drug treatment needs to employ balanced methods because therapeutic advantages should always exceed the detrimental side effects that patients experience. Regional healthcare treatment protocols function as primary determiners of how doctors prescribe medication. Typical Asian medical practices tend to use anticonvulsants instead of Lithium because patients believe they manage better without unwanted side effects. However, international guidelines recommend Lithium as the first-choice treatment, as Mandal et al. (2019) and Marx et al. (2023) explain. Prosecuting differences in prescription choices indicates how healthcare systems and cultural beliefs determine therapeutic decisions. Healthcare providers in these regions often select anticonvulsants like valproic acid and Lamotrigine instead of lithium-based treatments since patient satisfaction plays a key role in their decision-making. In contrast, this practice leads to suboptimal outcomes, as proven by lithium therapy's superior efficacy. Combining evidence-based guidance and recognizing regional treatment preferences and cultural elements throughout planning processes highlights the importance of creating harmonized global treatment protocols.

Patient apprehension about lithium side effects and extended usage acts as the primary reason for international avoidance of this treatment despite confirmed effectiveness (Yee et al., 2021). Drug treatment protocols need standardization because different regions show a preference for anticonvulsants, thus requiring specific protocols for various healthcare environments. Standardized approaches in healthcare would support clinicians in assigning

optimal treatments to patients, decrease adverse outcomes, and improve patient compliance with their prescribed medicine.

Interpretation of Findings

Research findings show that Lithium represents the best available therapy for bipolar disorder maintenance throughout extended periods and in preventing its relapses. Researchers have confirmed that lithium treatment produces reliable outcomes, with its recognized protective effects on the nervous system, suicide reduction, and overall functionality improvements (Volkmann, Bschor & Köhler, 2020). There are two significant constraints to using Lithium for treatment due to its restricted therapeutic window because it requires regular toxicology checks that restrict broad usage and create issues for patients with weight gain complications. Thyroid condition changes as well as impairment to cognitive processing. Valproic acid, together with Lamotrigine, serve as alternative treatments that prove beneficial based on specific patient scenarios. Healthcare providers must monitor valproic acid serum levels carefully because this medication works best for acute mania treatment while also requiring close attention to avoid adverse toxicities. Because it successfully prevents depressive episodes, Lamotrigine serves patients who have bipolar disorder type II.

In contrast, its reduced ability to manage acute mania prevents it from being used alone for treating bipolar disorder (Carli et al., 2023). Because different patients respond differently to anticonvulsants and because complete management usually needs multiple medications, physicians should develop individualized treatment plans. The success of these treatments depends on specific patient health characteristics and how well a person tolerates the medicines and other health problems impacting their response to treatment.

Strengths and Limitations

This review presents a systematic analysis of data from various studies, including RCTs and observations, which allowed us to obtain the overall vision of how Lithium and anticonvulsants compare. Research published between 2015 and 2024 enables the findings to utilize present-day evidence demonstrating modern clinical practice patterns. Thematic analysis created an organized method to examine results between different therapy approaches, which featured symptom change and relapse reduction, with specific attention paid to medicine side effects.

The review encounters limitations due to distributional differences between methodologies and designs that structured the examined research. Observational research creates bias problems, especially concerning multiple medication prescriptions and treatment compliance rates. The assessment fails to investigate the sustainability of patient life quality combined with various essential components, such as financial performance relative to alternatives that doctors need while selecting treatments. The review did not comprehensively explore regional differences in prescribing guidelines and local healthcare practices, thus preventing universal extrapolation of research findings.

Clinical Implications

Medical applications from this review produce several important outcomes with practical value for clinical situations. Medical professionals use Lithium as their initial choice for bipolar disorder maintenance therapy because it proves excellent at preventing relapse events while also reducing suicidal thoughts. The limited therapeutic margin and complications from lithium use need medical attention because they pose dangers to patients who have multiple health conditions or face an increased risk of toxic effects. The effective treatment alternatives for bipolar disorder type II patients or people who cannot receive lithium therapy include valproic acid and Lamotrigine, which function as anticonvulsants. The acute treatment of mania benefits most from valproic acid since Lamotrigine demonstrates superior anti-depressive properties compared to Lithium, which performs poorly in preventing depressive relapses. Treatment selection for bipolar disorder patients requires analysis of their unique health characteristics together with their medical history of treatment responses and current health conditions, including age. Healthcare providers need to develop structured approaches for managing polypharmacy in bipolar disorder treatment because both positive therapeutic combinations and adverse drug effects and drug interactions demand careful balancing. Every patient receives treatment based on their requirements, and ongoing medical assessments confirm the most effective and secure methods to handle the condition.

Conclusion

The systematic review demonstrates that Lithium stands as the predominant treatment approach for bipolar disorder management because it provides effective relapse prevention along with risk reduction in suicide attempts. The antiepileptic drugs valproic acid and Lamotrigine serve as valuable treatment choices for brief symptom control, but their effectiveness is low compared to Lithium. Further, the review recommends that treatment decisions be based on the individual patient factors, their ability to handle side effects, and their response patterns. Clinical practitioners commonly use polypharmaceutical approaches, which create complications in bipolar disorder care while requiring

ongoing evaluation through medical decision-making processes when making or changing medication prescriptions. Scientists need to develop standardized therapy guidelines and measure extended medication effectiveness while exploring detailed outcomes for bipolar disorder patients, like life quality progression and treatment spending efficiency. This review helps expand existing evidence that directs physicians toward the selection of optimal treatments for bipolar disorder control.

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Appendices

Appendix 1: Systematic Review Table

Study	Focus	Key Findings	Drug(s) Assessed	Conclusion
Lin et al. (2022)	Prescription patterns of psychotropic drugs in Asia	High prevalence of polypharmacy in BD treatment across Asia, preference for anticonvulsants	Lithium, Anticonvulsants, Antipsychotics	Anticonvulsants are commonly used in Asia, with polypharmacy being prevalent.
Hsu et al. (2022)	Variability and efficacy of manic treatment with Lithium, anticonvulsants, and antipsychotics	Lithium and antipsychotics show better consistency in treating manic symptoms and variability in anticonvulsants.	Lithium, Anticonvulsants, Antipsychotics	Lithium is more consistent, but anticonvulsants show variability.
Park et al. (2024)	Comparison of international treatment guidelines for BD	Guideline variations due to geographical differences and expert consensus	Lithium, Anticonvulsants, Antipsychotics	Regional guideline differences due to expert consensus and clinical evidence availability
Loo et al. (2023)	Clozapine use in BD treatment in Asia	Clozapine used in treatment-resistant BD, associated with older age and male sex	Clozapine	Clozapine is effective for treatment-resistant BD but has adverse effects

Airainer & Seifert (2024)	Efficacy and safety of Lithium in BD	Lithium is superior in long-term efficacy for manic and depressive symptoms, with a lower relapse rate.	Lithium	Lithium is the most effective long-term treatment, reducing relapse and suicide risk.
Kessing et al. (2018)	Maintenance therapy of Lithium vs other mood stabilizers	Lithium monotherapy is more effective than other mood stabilizers in maintenance therapy	Lithium, Anticonvulsants	Lithium outperforms other mood stabilizers in maintenance therapy
López-Muñoz et al. (2018)	Historical treatment review of BD with Lithium and anticonvulsants	Lithium's long-standing efficacy as a gold standard, historical milestones in treatment development	Lithium, Anticonvulsants	Lithium remains the benchmark drug for BD, with robust clinical evidence
Chen et al. (2022)	Effectiveness of valproic acid in different serum concentrations	Valproic acid concentrations of 50-74 mg/ml are associated with lower mood episode recurrence risk	Valproic Acid	Moderate serum concentrations of valproic acid reduce the risk of mood episode recurrence.