

Oxcarbazepine (OXC) in Mood Disorders

# of patients	Diagnosis	Trial Duration	Type of Study	OXC alone or as adjunctive therapy?	OXC dose (mg/day)	Number of patients improved (%)	Investigator
Open Studies and Case Reports:							
48	Manic symptoms	Unknown	Open multi-center study	Adjunct	Up to 2100 (3000 for 1 patient)	83% with good therapeutic results	Muller and Stoll, 1984
10	Mania Schizoaffective psychosis Excited schizophrenia	3 weeks	Open study adjunct to haloperidol	Adjunct	900	All patients had a decrease of psychotic symptoms, mania, and hostility	Velikonja and Heinrich, 1984
13	Bipolar	13 months (mean)	Open study of CBZ (n=4) vs. OXC (n=9)	Adjunct	600-1200	No reductions in frequency of episodes on either CBZ or OXC; was reduction in severity of symptoms in individual patients	Greil et al., 1985
10	Bipolar and Schizoaffective	6-16 months	Randomized study of OXC (n=4) vs. lithium (n=6)	Adjunct (n=3) and monotherapy	300-900	2/4 (50%) had no relapses on OXC vs. 3/6 (50%) had no relapses on lithium	Cabrera et al., 1986
15	Bipolar disorder	≤ 33 years	Case studies of OXC (n=8) vs. lithium (n=7)			Lithium response (67%) greater than OXC response (33%)	Wildgrube 1990
1	Bipolar I child	7 months	Case report	Adjunct	300	1/1 (100%)	Teitelbaum, 2001
13	Bipolar I, II, and NOS	Varied (1-24 weeks)	Retrospective outpatient chart review	Adjunct (monotherapy n=1)	592.3 (mean)	6/13 (46%) showed mild improvement; 2/13 (16%) showed moderate improvement	Ghaemi et al., 2002
12	Acute manic	35 days	Open study, 14 days on, 7 days off, 14 days on	Monotherapy	1650 (mean dose at end of trial)	4/12 (33%) improved during the two OXC phases (only those with moderate mania)	Hummel et al., 2002
4	Bipolar II	Varied	Case reports	Monotherapy (n=2); Adjunct (n=2)	Up to 1200	4/4 (100%) improved with OXC	Nasr, 2002
21	Bipolar, Schizoaffective, Schizophrenic, Psychosis	5 months (mean)	Retrospective and concurrent chart review of CBZ (n=8) vs. OXC (n=13)	Adjunct and monotherapy	1200 (mean)	No significant differences in efficacy between CBZ and OXC, both groups improved during hospitalization	Alvarez et al., 2003
56	31 Bipolar 5 Unipolar 6 Schizoaffective 14 Schizophrenic	Varied	Retrospective chart review	Adjunct and monotherapy	831 at discharge (mean)	Scores on two different scales improved highly significantly for all patients given OXC (39.3% and 43.9%, respectively), in all three syndrome areas (mania, depression, psychosis)	Centorrino e al., 2003

Oxcarbazepine (OXC) in Mood Disorders (continued)

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42	Bipolar I, II, and NOS	16.2 weeks (mean)	Retrospective chart review	Adjunct and monotherapy	1056.6 (mean)	24/42 (57%) had moderate to marked improvement	Ghaemi et al., 2003
54	40 Bipolar 17 Schizoaffective	Varied	Retrospective matching study of patients treated with OXC (n=27) vs. VPA (n=27)	Adjunct	1233 (mean)	Both groups significantly improved over the course of hospitalization; OXC appeared more efficacious for negative symptoms	Raja and Azzoni, 2003
18	16 Bipolar I 2 Bipolar II	8 weeks	Open study of patients who had failed to respond to lithium	Adjunct to lithium	919.4 (mean)	11/18 (61%) considered responders after 8 weeks; of these 11, 7 (64%) remained responders in an extended follow-up period (4-12 months)	Benedetti et al., 2004
Controlled Studies:							
6	Manic psychosis	Varied	Double-blind, placebo-controlled, on-off-on study	Monotherapy	1800-2100	50% reduction in manic symptoms with OXC vs. 26% reduction off OXC	Emrich et al., 1983
20	Manic symptoms	2 weeks	Controlled, randomized multi-center trial of OXC (n=10) vs. haloperidol (n=10)	Adjunct	900-1200	Reduction of manic symptoms in both groups after 2 weeks	Muller and Stoll, 1984
38	Acute mania	2 weeks	Double-blind study of OXC (n=19) vs. haloperidol (n=19)	Monotherapy	2400 (mean)	Both OXC and haloperidol equally effective in reducing manic symptoms after 2 weeks	Emrich et al., 1990
52	Acute mania	2 weeks	Double-blind study of OXC (n=28) vs. lithium (n=24)	Monotherapy	1400 (mean)	Both OXC and lithium equally effective in reducing manic symptoms after 2 weeks	Emrich et al., 1990

Abbreviations: VPA, valproic acid; CBZ, carbamazepine; mg/day, milligrams per day; NOS, not otherwise specified.

Sources:

- Alvarez G, Marsh W, Camacho IA, Gracia SL. Effectiveness and tolerability of carbamazepine vs. oxcarbazepine as mood stabilizers. *Clin Res Reg Affairs* 2003; 20:365-372.
- Benedetti A, Lattanzi L, Pini S, Musetti L, Dell'Osso L, Cassano GB. Oxcarbazepine as add-on treatment in patients with bipolar manic, mixed or depressive episode. *J Affect.Disord* 2004; 79:273-277.
- Cabrera JF, Muhlbauer HD, Schley J, Stoll KD, Muller-Oerlinghausen B. Long-term randomized clinical trial on oxcarbazepine vs. lithium in bipolar and schizoaffective disorders: Preliminary results. *Pharmacopsychiatry* 1986; 19:282-283.
- Centorrino F, Albert MJ, Berry JM, Kelleher JP, Fellman V, Line G, Koukopoulos AE, Kidwell JE, Fogarty KV, Baldessarini RJ. Oxcarbazepine: clinical experience with hospitalized psychiatric patients. *Bipolar Disord* 2003; 5:370-374.
- Emrich HM, Altmann H, Dose M, Von Zerssen D. Therapeutic effects of GABA-ergic drugs in affective disorders. A preliminary report. *Pharmacol Biochem Behav* 1983; 19:369-372.
- Emrich HM. Studies with oxcarbazepine (Trileptal) in acute mania. *Int Clin Psychopharmacol* 1990; 5:83-88.
- Ghaemi SN, Berv DA, Klugman J, Rosenquist KJ, Hsu DJ. Oxcarbazepine treatment of bipolar disorder. *J Clin Psychiatry* 2003; 64:943-945.
- Ghaemi SN, Ko JY, Katzow JJ. Oxcarbazepine treatment of refractory bipolar disorder: a retrospective chart review. *Bipolar Disord* 2002; 4:70-74.
- Greil W, Kruger R, Rosnagl G, Schertel M, Walther A. Prophylactic treatment of affective disorders with carbamazepine and oxcarbazepine: an open clinical trial. In: Pichot P, Berner P, Wolf R, editors. *Psychiatry: The State of the Art*. New York: Plenum Press, 1985, pp. 491-494.
- Hummel B, Walden J, Stampfer R, Dittmann S, Amann B, Sterr A, Schaefer M, Frye MA, Grunze H. Acute antimanic efficacy and safety of oxcarbazepine in an open trial with an on-off-on design. *Bipolar Disord* 2002; 4:412-417.
- Muller AA, Stoll K-D. Carbamazepine and oxcarbamazepine in the treatment of manic syndromes: studies in Germany. In: Emrich HM, Okuma T, Muller AA, editors. *Anticonvulsants in affective disorders*. Amsterdam: Excerpta Medica, 1984, pp. 139-147.
- Nasr S. Oxcarbazepine for mood disorders. *Am.J Psychiatry* 2002; 159:1793.
- Raja M, Azzoni A. Oxcarbazepine vs. valproate in the treatment of mood and schizoaffective disorders. *Int J Neuropsychopharmacol* 2003; 6:409-414.
- Teitelbaum M. Oxcarbazepine in bipolar disorder. *J Am.Acad.Child Adolesc.Psychiatry* 2001; 40:993-994.
- Velikonja M, Heinrich K. Effect of oxcarbazepine on affective and schizoaffective symptoms: a preliminary report. In: Emrich HM, Okuma T, Muller AA, editors. *Anticonvulsants in Affective Disorders*. Amsterdam: Elsevier, 1984, pp. 208-210.
- Wildgrube C. Case-studies on prophylactic long-term effects of oxcarbazepine in recurrent affective disorders. *Int Clin Psychopharmacol* 1990; 5:S89-S94.