

## Topiramate in Mood Disorders

# of Patients	Target Symptoms	Type of Study	Dose (mg/day)	Monotherapy or Adjunctive?	Trial Duration	Number of Patients Improved (%)	Weight Loss?	Investigator(s)
18	Refractory mood disorders	Open	200	Adjunct	16 wks	23/44 (52%)	Unknown	Marcotte, 1998
20	18 Bipolar 2 Schizoaffective, bipolar type	Open	100-300	Adjunct	5 weeks	12/20 (60%)	9.4 lbs avg.	Chengappa et al., 1999
5	4 Bipolar 1 Schizoaffective	Retrospective chart review	100-375 (195 mean)	Varied	Varied	5/5 (100%)	22 lbs avg.	Gupta et al., 2000
54	30 Manic 11 Depressed 13 Euthymic	Open	193 " 122	Adjunct	10 wks	19/30 (63%) 3/11 (27%)	4.9% at last evaluation	McElroy et al., 2000
11	Mania	On-Off-On	25-200	Adjunct	10 days on, 5 days off, 7 days on	7/11 (64%), 1 <sup>st</sup> trial; 8/9 (89%), 2 <sup>nd</sup> trial	Unknown	Grunze et al., 2001
76	Bipolar disorder	Retrospective chart review	12.5-400 (96.1 mean)	Adjunct	17.5 weeks	10/76 (13%) moderate to marked improvement	14.2 lbs (avg) in 50%	Ghaemi et al., 2001
10	Acute Mania	Open	50-1300 (536 mean)	Monotherapy	28 days	5/10 (50%) mod. to marked improvement	4.7 lbs avg. (n=4)	Calabrese et al., 2001
26	Bipolar I or II children or adolescents	Retrospective chart review	25-400 (104 mean)	Monotherapy (n=3) or Adjunct	1-30 months (mean = 4.1 months)	16/26 (62%) had overall illness improvement	5 kg (n=9)	DeBello et al., 2002
14	Acute mania	Open	150-700 (310 mean)	Monotherapy (n=8) or Adjunct	4 weeks	8/13 (61.5%) ≥50% reduction in mania scores	Four patients lost weight, two patients gained weight	Bozikas et al., 2002
36	Bipolar Depression	Single-blind, randomized study vs. bupropion	50-300 (176 mean)	Adjunct	8 weeks	10/18 (56%) vs. 59% for bupropion	5.8 kg avg.	McIntyre et al., 2002
34	Refractory mood disorder	Open	100-400 (202 mean)	Adjunct	6 months	10/17 (59%) manic; 6/11 (55%) depressed; 19/34 (56%) all groups	2.3 kg avg. (n=10)	Vieta et al., 2002
16	Female major depression, obesity	Retrospective chart review	100-400 (277 mean)	Adjunct	40 weeks	7/16 (44%)	6.1 % avg.	Carpenter et al., 2002
14	Refractory bipolar disorder	Retrospective chart review	25-300 (100 mean)	Adjunct	1-64 weeks (22.4 mean)	9/14 (64%)	29.7 lbs avg. (n=4)	Guille and Sachs, 2002

## Topiramate in Mood Disorders (continued)

# of Patients	Target Symptoms	Type of Study	Dose (mg/day)	Monotherapy or Adjunctive?	Trial Duration	Number of Patients Improved (%)	Weight Decrease?	Investigator(s)
19	Bipolar II	Open	117 (mean)	Adjunct	12 weeks	8/15 (53%) of hypomanic patients were responders; 2/4 (50%) of depressed patients were responders	2.4 kg avg. (n=6)	Vieta et al., 2003
56	Bipolar disorder	Open	200-400 (289 mean)	Adjunct	1 year	Statistically significant reduction in number of new episodes (mania/depression) in year on topiramate	1-2 kg in five patients	Lykouras and Hatzimanolis, 2004
<b>4 Controlled Studies:</b>								
	Acute Mania	Double-blind, controlled		Monotherapy	3-4 weeks	Topiramate = Placebo; Lithium > Topiramate		Sachs et al., 2004

**Conclusion:** Topiramate may have useful properties for weight loss in addition to reports of mood stabilization when used as an open-label, adjunctive treatment. It is not an effective acute antimanic drug in monotherapy.

## Sources:

Marcotte D. Use of topiramate, a new anti-epileptic as a mood stabilizer. *J Affect Disord* 1998; 50:245-251.

Chengappa KN, Rathore D, Levine J, Atzert R, Solai L, Parepally H, Levin H, Moffa N, Delaney J, Brar JS. Topiramate as add-on treatment for patients with bipolar mania. *Bipolar Disord* 1999; 1:42-53.

Gupta S, Masand PS, Frank BL, Lockwood KL, Keller PL. Topiramate in bipolar and schizoaffective disorders: weight loss and efficacy. *Prim.Care Companion. J Clin Psychiatry* 2000; 2:96-100.

McElroy SL, Suppes T, Keck PE, Frye MA, Denicoff KD, Altshuler LL, Brown ES, Nolen WA, Kupka RW, Rochussen J, Leverich GS, Post RM. Open-label adjunctive topiramate in the treatment of bipolar disorders. *Biol Psychiatry* 2000; 47:1025-1033.

Grunze HC, Normann C, Langosch J, Schaefer M, Amann B, Sterr A, Schloesser S, Kleindienst N, Walden J. Antimanic efficacy of topiramate in 11 patients in an open trial with an on-off-on design. *J Clin Psychiatry* 2001; 62:464-468.

Ghaemi SN, Manwani SG, Katzow JJ, Ko JY, Goodwin FK. Topiramate treatment of bipolar spectrum disorders: a retrospective chart review. *Ann Clin Psychiatry* 2001; 13:185-189.

Calabrese JR, Keck PE, Jr., McElroy SL, Shelton MD. A pilot study of topiramate as monotherapy in the treatment of acute mania. *J Clin Psychopharmacol* 2001; 21:340-342.

DelBello MP, Kowatch RA, Warner J, Schwiers ML, Rappaport KB, Daniels JP, Foster KD, Strakowski SM. Adjunctive topiramate treatment for pediatric bipolar disorder: a retrospective chart review. *J Child Adolesc Psychopharmacol* 2002; 12:323-330.

Bozikas VP, Petrikis P, Kourtis A, Youlis P, Karavatos A. Treatment of acute mania with topiramate in hospitalized patients. *Prog Neuropsychopharmacol Biol Psychiatry* 2002; 26:1203-1206.

McIntyre RS, Mancini DA, McCann S, Srinivasan J, Sagman D, Kennedy SH. Topiramate versus bupropion SR when added to mood stabilizer therapy for the depressive phase of bipolar disorder: a preliminary single-blind study. *Bipolar Disord* 2002; 4:207-213.

Vieta E, Torrent C, Garcia-Ribas G, Gilabert A, Garcia-Pares G, Rodriguez A, Cadevall J, Garcia-Castrillon J, Lusilla P, Arrufat F. Use of topiramate in treatment-resistant bipolar spectrum disorders. *J Clin Psychopharmacol* 2002; 22:431-435.

Carpenter LL, Leon Z, Yasmin S, Price LH. Do obese depressed patients respond to topiramate? a retrospective chart review. *J Affect Disord* 2002; 69:251-255.

Guille C, Sachs G. Clinical outcome of adjunctive topiramate treatment in a sample of refractory bipolar patients with comorbid conditions. *Prog Neuropsychopharmacol Biol Psychiatry* 2002; 26:1035-1039.

Vieta E, Sanchez-Moreno J, Goikolea JM, Torrent C, Benabarre A, Colom F, Martinez-Aran A, Reinares M, Comes M, Corbella B. Adjunctive topiramate in bipolar II disorder. *World J Biol Psychiatry* 2003; 4:172-176.

Lykouras L, Hatzimanolis J. Adjunctive topiramate in the maintenance treatment of bipolar disorders: an open-label study. *Curr Med Res Opin* 2004; 20:843-847.

Sachs GS, Kushner SF, Wang D, Olson W, Capece J, Fazzino L, Rosenthal N. Topiramate in adults with acute bipolar I mania: Pooled results. In: *New Research and Abstracts, 2004 American Psychiatric Association Annual Meeting*, Abstract NR365: 135.