

# #19

## ABSTRACT

**Objective:** To assess the efficacy, safety, and tolerability of once-daily (QD) extended-release carbamazepine capsules (ERC-CBZ; Shire) in treating patients with bipolar disorder

**Method:** Assessment compared QD dosing of ERC-CBZ with twice-daily (BID) dosing by matching the charts of 23 study participants to those of 23 similar control patients who had been taking ERC-CBZ dosed BID.

**Results:** No significant difference was observed in Clinical Global Impression–Improvement (CGI-I) scores between QD and BID groups. In addition, the percentage of responders (CGI-I score  $\leq 3$ ) was the same for both groups (83%). Relapse rates and measures of safety and tolerability were also similar between the 2 groups.

**Conclusion:** Treatment with ERC-CBZ dosed QD is comparable in efficacy, safety, and tolerability to ERC-CBZ dosed BID for treatment of patients with bipolar disorder.

# SAFETY AND EFFICACY OF EXTENDED-RELEASE CARBAMAZEPINE CAPSULES IN PATIENTS WITH BIPOLAR DISORDER: QD VS BID DOSING

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## INTRODUCTION

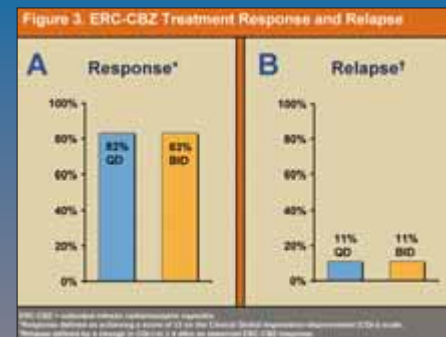
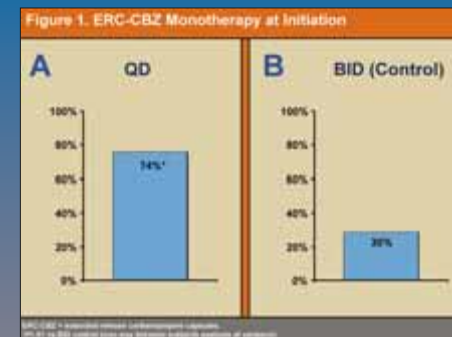
- Successful treatment of bipolar disorder is contingent on patient adherence to medication regimen, with fewer daily doses being a factor<sup>1,2</sup>
- Extended-release carbamazepine (ERC-CBZ; Shire) has been an effective therapeutic option for the treatment of bipolar disorder<sup>3,5</sup>
- ERC-CBZ was developed not only to improve serum carbamazepine fluctuations to reduce adverse events, but to enhance patient compliance by minimizing dosing frequency<sup>6,7</sup>
- The purpose of this retrospective review was to determine the efficacy, safety, and tolerability of ERC-CBZ dosed once daily (QD) compared to twice daily (BID) in patients with bipolar disorder

## METHODS

- A chart review from 1998 to 2004 was conducted at a single-site private practice for pediatric and adult patients (ages 4 to 70) diagnosed with bipolar disorder according to DSM-IV criteria
- Twenty-three patients treated with ERC-CBZ dosed QD were matched to a control group of 23 similar patients who were dosed BID
- Variables compared included patient demographics, bipolar subtype, ERC-CBZ dose, adverse events, and Clinical Global Impression–Severity (CGI-S) and Clinical Global Impression–Improvement (CGI-I) scores
- CGI-S was used to assess severity at the time of ERC-CBZ initiation
- CGI-I was used to assess treatment response
  - Response was defined as CGI-I  $\leq 3$
  - Relapse was defined as CGI-I  $\geq 4$  after a response had been previously observed

## RESULTS

- Patient demographics between the ERC-CBZ groups dosed QD vs BID were similar with respect to gender (both 70%) and mean age (QD,  $22 \pm 16$ ; BID,  $22 \pm 15$ ) (Table 1)
- ERC-CBZ monotherapy at initiation was more prevalent in patients dosed QD (74%) than in patients dosed BID (30%,  $P = .01$ ) (Figure 1)
- Bipolar I was the most prevalent subtype (43%), followed by bipolar NOS (35%) and bipolar II (22%) in the ERC-CBZ group dosed QD (Table 2)
- Ninety-one percent of QD group participants were at least markedly ill (CGI-S  $\geq 5$ ) (Figure 2)
- CGI-I scores and mean ECG-CBZ dose when CGI-I was measured were similar between groups dosed QD and BID (Table 3)
- ERC-CBZ treatment response (both 83%) and relapse rates (both 11%) were identical between the QD and BID groups (Figure 3)



	QD	BID (Control)	P-Value
Participants	23	23	
Gender (% Female)	69.6%	69.6%	.75
Mean age (SD)	21.9 (16.2)	21.8 (14.8)	.80
Age range	4–70	5–86	
<b>Response to ERC-CBZ</b>			
Clinical Global Impression–Improvement	1.5	2.4	.20
Dose (SD)	415.0 (168.7)	468.6 (176.9)	.27

	QD	BID (Control)	P-Value
Bipolar I Disorder	43%	43%	.77
Mixed	4.3%	4.3%	.47
Mood	38.4%	38.4%	.73
Depressed	8.7%	8.7%	.88
Bipolar II Disorder	22%	22%	.72
Bipolar NOS	35%	35%	.76

	QD	BID (Control)	P-Value
Dizziness	13.0%	13.0%	.88
Somnolence	13.0%	6.7%	1.00
Nausea	13.0%	4.3%	.88
Rash	4.3%	13.0%	.48
Headache	8.7%	4.3%	1.00

## RESULTS (CONT)

- No significant difference was observed in the frequency of treatment-emergent adverse events between QD and BID groups (Table 3)
- The most common adverse events in the QD group included dizziness, somnolence, and nausea (all at 13%); dizziness and rash (both 13%); and somnolence (9%) in the BID group (Table 3)

## CONCLUSIONS

- Retrospective review of QD vs BID ERC-CBZ dosing in the treatment of pediatric and adult patients with bipolar disorder showed similar results in terms of efficacy, safety, and tolerability
- The high percentage of QD patients (74%) who were not taking any other psychotropic medication at study initiation suggests that a QD regimen may be associated with increased efficacy that was not detected in CGI-I scores
- QD dosing of ERC-CBZ may be considered a more convenient treatment option than a BID regimen for bipolar disorder patients

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