ESLICARBAZEPINE

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Eslicarbazepine acetate (ESL)constitutes a third-generation, single-enantiomer member of the long-established family of first-line dibenz/b,f/azepine AEDs represented by carbamazepine (CBZ, first-generation) and oxcarbazepine (OXC, second-generation).Elsicarbazepine is the S- carbazepine enantomier While oxcarbazepine metabolites to both R- and the S- licarbazepine, ESL favors the S- far more than the R. The main differentiator between ESL and carbamazepine (CBZ) is that there is no toxic epoxide while the main differentiator vs. OXC can be said to be the far higher ratio of S-licarbazepine. ESL enhances sodium channel slow inactivation.

Because the half life (t½) is 13-20 hours in patients on concomitant AEDs, the drug was tested as once-daily dosing in the clinical trials. In the three phase III regulatory trials, percentage seizure reduction varied between 33- 45% at the 1200 mg ESL daily dose with responder rates (≥50% seizure reduction versus baseline) ranging between 38-43%. Only a few patients in each trial remained seizure-free throughout. Data relating to quality of life and depression were positive in these patients. Commonest side-effects are dizziness and somnolence. Patients taking the drug with CBZ were more likely to report diplopia, abnormal coordination and dizziness than with other AED combinations. . ESL is now approved by the EMA as a drug to be added on to other AEDs for patients with refractory partial seizures.].