Fortunately, there are several developments in this area this year. Two new antiepileptic drugs (AEDs) have been approved, Vimpat (lacosamide) and Banzel (rufinamide). In addition, there are new extended release formulations of existing AEDs, Keppra-XR and Lamictal-XR. Finally, there is another formulation of Lamictal available, which is a “melts-in-your-mouth” type called Lamictal-ODT. Below is a brief summary of these.

**Vimpat** (generic name: lacosamide):
Vimpat is a new medication approved for add-on use in those older than 16 years with partial-onset seizures, meaning seizures that start in one part of the brain (also known as focal seizures, partial epilepsy, or localization-related epilepsy, and would include seizures from any lobe such as temporal lobe epilepsy or frontal lobe epilepsy). It is approved for use in combination with any other AED. It can be taken with or without food, and can be crushed if needed. It is usually taken twice per day, and can begin working within a week.

Overall, Vimpat is well tolerated, with no significant effects on alertness, thinking, mood or weight and only rare allergic reactions. The most common side effects are dizziness, headache, nausea and double vision, all of which occur more often at higher doses.

**How well does it work?** In the clinical trials leading to approval, just under half of patients (40-49%) had their seizure frequency cut in half. Overall, this is probably comparable to several other AEDs, though no studies have compared Vimpat directly to other AEDs.

**Banzel** (generic name: rufinamide)
Banzel is a new medication approved for add-on use in children 4 years of age and older and in adults with a specific epilepsy syndrome known as Lennox-Gastaut Syndrome (LGS). LGS is a syndrome that includes multiple seizure types that are usually difficult to control, and patients are typically cognitively impaired. Seizure types include tonic (brief whole body stiffening), atonic (sudden loss of muscle tone), absence (staring) and generalized tonic-clonic (“grand mal”, or convulsions). Some of these seizures can cause sudden falls, known as “drop attacks”, particularly the tonic and atonic seizures. Banzel is best taken with food, can be crushed if needed (though it has a bitter taste), and is usually taken twice per day.

The most common side effects of Banzel are sleepiness and nausea/vomiting, but it can also cause dizziness, headache, blurred vision and tremor. These side effects are usually worse at higher doses. It seems to have little if any adverse effect on thinking or behavior.

**How well does it work?** Overall, seizures decreased by about 1/3 in the clinical trials. Drop attacks decreased by 40% (almost half). As there are not many effective options for these patients, this is a welcome addition to the fight against seizures in LGS.

For more information on LGS, please see the LGS foundation website at [http://www.lgsfoundation.org/](http://www.lgsfoundation.org/).

**Keppra-XR** (generic name: levetiracetam):
This is a new extended-release form of Keppra that allows once a day dosing. It provides the same medication, but releases it slowly over many hours in the gastro-intestinal tract.

**Lamictal-XR** (generic name: lamotrigine):
This is a new extended-release form of Lamictal that allows once a day dosing. It provides the same medication, but releases it slowly over many hours in the gastro-intestinal tract.

For further information on antiepileptic drugs, please see:

Lawrence J. Hirsch, MD