

Drug	Example	Type	Action	Uses	Side Effects	Important information
Benzodiazepines	1. Diazepam 2. lorazepam	Older (first generation)	Enhancement of inhibitory GABAergic impulses	adjunctive therapy for→ 1. Myoclonic 2. partial seizures★ 3. generalized tonic-clonic seizures # 4. status epilepticus ♪		<ul style="list-style-type: none"> • Diazepam→ rectal administration to avoid prolonged generalized tonic-clonic seizures • Use only after trials with monotherapy or combinations treatment
Phenobarbital		Older (first generation)	<ul style="list-style-type: none"> • Enhancement of inhibitory GABAergic impulses • Is a cytochrome P450 hepatic enzyme inducer 	Status epilepticus ♪		It decreased ↓ effectiveness of drugs that are metabolized by the CYP450 enzyme system
Carbamazepine	Tegretol	Older (first generation)	Blocks Na⁺ channels	1. Partial seizures★ 2. <u>secondarily</u> generalized tonic-clonic seizures # 3. trigeminal neuralgia 4. bipolar disease	1. Skin rash 2. hyponatremia	
Phenytoin	Epanutin	Older (first generation)	Blocks Na⁺ channels	1. Partial seizures★ 2. generalized tonic-clonic seizures # 3. Status epilepticus ♪ (IV)	1. Ataxia 2. gingival hyperplasia 3. peripheral neuropathies 4. osteoporosis	Small increases in a daily dose cause drug-induced toxicity
Valproic Acid	1. Convulex 2. Depakine	Older (first generation)	Blocks Na⁺ & Ca²⁺ channels	1. Partial seizures★ 2. generalized tonic-clonic seizures #	1. Hepatic toxicity , 2. Teratogenicity (neural tube defects)	
Gabapentin	1. Gabatrex 2. Neurontin	New (second generation)	<ul style="list-style-type: none"> • Not known • Is an analog of GABA 	adjunctive therapy for→ 1. partial seizures★ 2. neuropathic pain (post herpetic neuralgia)	<i>Mild</i> adverse effects and <i>limited</i> or <i>no</i> reported drug interactions → Well tolerated by elderly (safe)	
Lamotrigine	Lamictal	New (second generation)	Blocks Na⁺ & Ca²⁺ channels	1. partial seizures★ 2. generalized seizures # 3. typical absence seizures	1. Rash 2. Stevens-Johnson syndrome	<ul style="list-style-type: none"> • Side effect : Stevens-Johnson syndrome • Half-life (24–35 hours)
Oxcarbazepine		New (second generation)		Partial seizures ★ (In <u>adults</u> and <u>children</u>)		Is a prodrug
Pregabalin	Lyrica	New (second generation)	Blocks Ca²⁺ channels	1. Partial seizures★ 2. neuropathic pain associated with <u>diabetic peripheral neuropathy</u> 3. Post herpetic neuralgia 4. fibromyalgia	1. Drowsiness 2. Blurred vision 3. Weight gain 4. Peripheral edema	
Topiramate	Topamax	New (second generation)	<ul style="list-style-type: none"> • Blocks Na⁺ channels • Binding to GABA-A receptors → increases frequency of chloride channel opening 	1. Partial seizures★ 2. <u>primary</u> generalized epilepsies # 3. migraine	1. Somnolence 2. weight loss 3. Paresthesias 4. renal stones	It is a carbonic anhydrase inhibitor & may act at glutamate (NMDA) sites