

Drug Treatment of Epilepsy in Adults				
First line drugs (generic name)	Available as (brand name)	Average total dose in a day for adults	Treatment	Possible side effects include the following list (any severe reactions should be reported to your GP or neurologist)
Carbamazepine	Carbamazepine: Tablets 100mg, 200mg, 400mg. Tegretol: Tablets 100mg, 200mg, 400mg. Chewtabs 100mg, 200mg. Liquid (sugar free) 100mg/5mL. Suppositories 125mg, 250mg. Tegretol Retard: Tablets 200mg, 400mg.	600mg - 2000mg divided into up to 4 doses a day. Liquid is given 3 times a day. Tegretol Retard is usually taken twice a day.	Effective against generalised tonic clonic and partial seizures. Ineffective against absences. May worsen myoclonic seizures.	Skin rash, if allergic to carbamazepine. Diplopia (double vision), ataxia (unsteadiness) and nausea may occur initially or if the dose is too high.
Ethosuximide	Ethosuximide: Capsules 250mg. Emeside: Syrup 250mg/5ml Zarontin: Syrup 250mg/5ml	750mg - 1500mg divided into 2 or 3 doses a day.	Effective against absences only.	Nausea and drowsiness may occur initially or if the dose is too high. Anorexia (weight loss).
Lamotrigine	Lamictal: Tablets 25mg, 50mg, 100mg, 200mg. Dispersible tablets 2mg, 5mg, 25mg, 100mg. Lamotrigine: Tablets 25mg, 50mg, 100mg, 200mg. Dispersible tablets 5mg, 25mg, 100mg.	100mg - 200mg if taken alone or if also taking sodium valproate. 200mg - 400mg if also taking phenytoin, phenobarbitone or carbamazepine.	Effective against partial seizures and generalised tonic clonic seizures.	Skin rash if allergic to lamotrigine. Drowsiness, diplopia (double vision), dizziness, headache, insomnia, tremor and flu-like symptoms.
Levetiracetam	Keppra: Tablets 250mg, 500mg, 750mg, 1000mg. Oral solution 1000mg/10mL.	1000mg - 3000mg divided into 2 doses a day.	Effective against partial seizures with or without secondary generalisation, and adjunctive therapy for myoclonic seizures and Juvenile Myoclonic Epilepsy.	Dizziness, drowsiness, irritability, behavioural problems, insomnia, ataxia (unsteadiness), tremor, headache, nausea may occur in high dosages or when doses are increased, but will usually disappear after a few days.
Oxcarbazepine	Oxcarbazepine: Tablets 150mg, 300mg, 600mg. Trileptal: Tablets 150mg, 300mg, 600mg. Oral suspension 60mg/mL.	1200 - 2400mg divided into 2 or 3 doses a day.	Effective against partial seizures and secondarily generalised seizures.	Skin rash, if allergic to oxcarbazepine. Diplopia (double vision), ataxia (unsteadiness), headache, nausea, confusion and vomiting.
Sodium Valproate	Sodium Valproate: Tablets 200mg, 500mg. Oral solution 200mg/5mL. Epilim: Tablets 200mg, 500mg. Crushable tablets 100mg. Liquid (sugarfree) 200mg/5mL. Syrup 200mg/5mL. Epilim Chrono (slow release): Tablets 200mg, 300mg, 500mg. Epilim Chronosphere: Sachets 50mg, 100mg, 250mg, 500mg, 750mg. Episenta (slow release): Tablets 100mg, 300mg. Granules 500mg, 1000mg.	400mg - 2000mg divided into 1 or 2 doses a day.	Effective against generalised tonic clonic seizures, partial seizures, and absences.	Drowsiness and tremor are infrequent side effects. Hair loss occurs in some people but is not usually severe and is usually reversible if the dose is reduced. Weight gain may occur. Liver damage is rare. Sodium valproate has been associated with increased incidence of Polycystic Ovary Syndrome and menstrual irregularities. Any menstrual problems should be reported to the GP and neurologist. Sodium valproate is associated with a higher risk of foetal malformations than other AEDs, if taken in pregnancy.
Second Line Drugs (generic name)	Available as (brand name)	Average total dose in a day for adults	Treatment	Possible side effects include the following list (any severe reactions should be reported to your GP or neurologist)
Acetazolamide	Diamox: Tablets 250mg. Capsules (slow release) 250mg.	250mg - 1000mg divided into 2 or 3 doses a day.	Effective against generalised tonic clonic seizures, partial seizures and atypical absences. Also used for menstrual related seizures, certain episodic disorders and to enhance other anti-epileptic drugs (e.g. carbamazepine).	Loss of appetite, drowsiness, depression, paraesthesia (pins and needles in hands and feet), joint pain, polyuria (increased urine output), thirst, headache, dizziness, fatigue (tiredness) and irritability. Tolerance may develop.
Clobazam	Frisium: Tablets 10mg.	20mg - 50mg divided into 1 or 2 doses a day.	Effective against generalised tonic clonic seizures and partial seizures.	Drowsiness may occur but this drug is less sedating than clonazepam or diazepam. Tolerance may develop.
Clonazepam	Clonazepam: Tablets 0.5mg, 2mg. Rivotril: Tablets 0.5mg, 2mg.	1mg - 4mg divided into 2 doses a day.	Effective against generalised tonic clonic seizures, partial seizures, absences and myoclonic seizures.	Drowsiness and sedation are quite common but these may wear off. Tolerance tends to develop.
Gabapentin	Neurontin: Tablets 600mg, 800mg. Capsules 100mg, 300mg, 400mg. Gabapentin: Tablets 600mg, 800mg. Capsules 100mg, 300mg, 400mg.	1800mg - 3600mg divided into 3 doses a day.	Recommended in partial seizures where previous treatment has been ineffective. May make myoclonic seizures and/or absences worse.	Drowsiness, dizziness, and headache.
Lacosamide	Vimpat: Tablets 50mg, 100mg, 150mg, 200mg Syrup 15mg/mL	Between 200mg - 400mg divided into 2 doses.	Add on therapy for partial seizures.	Nausea, vomiting, dizziness, headache, drowsiness, depression, diplopia (double vision), impaired memory, impaired coordination, tremor, fatigue (tiredness), asthenia (muscle weakness), pruritus (itching).
Phenobarbital	Phenobarbital: Tablets 15mg, 30mg, 60mg. Elixir 15mg/5mL.	30mg - 180mg divided into 2 doses a day.	Effective against generalised tonic clonic seizures and partial seizures.	Drowsiness may occur initially. Lethargy, sedation and slowing of mental performance may persist.
Phenytoin	Phenytoin: Tablets 100mg. Epanutin: Capsules 25mg, 50mg, 100mg, 300mg. Chewable Infatabs 50mg. Suspension 30mg/5mL.	150mg - 600mg divided into 1 or 2 doses a day.	Effective against generalised tonic clonic seizures and partial seizures. Ineffective against absences. Blood tests are essential to guide dosing.	Skin rash if allergic to phenytoin. Drowsiness, ataxia (unsteadiness) and slurred speech may occur if the dose is too high. Coarsening of facial features, overgrowth of gums, excess hair growth and acne may occur with prolonged therapy, as can some anaemias.
Piracetam	Nootropil: Tablets 800mg, 1200mg. Oral solution 333.3mg/mL (to be followed with water to reduce the bitter taste).	7.2g - 20g divided into 2 or 3 doses a day.	Recommended in myoclonic seizures where previous treatment has been ineffective.	Very rare, but may include weight gain, diarrhoea, insomnia, drowsiness, nervousness, depression and rash.
Pregabalin	Lyrica: Capsules 25mg, 50mg, 75mg, 100mg, 150mg, 200mg, 300mg.	300mg - 600mg divided into 2 doses a day.	Effective against partial seizures, with or without secondary generalisation.	Dizziness, fatigue (tiredness), changes in mood, attention difficulties, changes in appetite, weight gain, blurred or double vision, oedema, drowsiness, speech disorder, memory impairment, confusion, paraesthesia (pins and needles). Very rarely rhabdomyolysis (damaged muscle tissue).
Primidone	Mysoline: Tablets 250mg.	500mg - 1500mg divided into 2 doses a day.	Effective against generalised tonic clonic seizures and partial seizures. May be ineffective against absences.	Nausea, unsteadiness, dizziness and drowsiness may occur initially. Sedation and slowing of mental performance may persist.
Rufinamide	Inovelon Tablets 100mg, 200mg, 400mg	200mg - 3600mg (depending on body weight and whether it is being used alongside sodium valproate) divided into 2 doses	Add on therapy for Lennox-Gastaut syndrome. This drug has a restricted licence (orphan drug).	Nausea, vomiting, constipation, diarrhoea, dyspepsia (heartburn), abdominal pain, weight loss, rhinitis (runny nose), dizziness, headache, drowsiness, insomnia, anxiety, fatigue (tiredness). Hypersensitivity syndrome (possibly including rash and fever) also reported - if concerned seek immediate medical attention.
Stiripentol	Diacomit Capsules 250mg, 500mg Sachets 250mg, 500mg	Up to 50mg/kg/day divided into 2 or 3 doses. Used alongside clobazam and sodium valproate.	Add on therapy for tonic clonic seizures in Severe Myoclonic Epilepsy in Infancy (SMEI). This drug has a restricted licence (orphan drug).	Nausea, vomiting, loss of appetite, weight loss (especially when used with sodium valproate), anorexia, insomnia, drowsiness, ataxia (loss of muscle coordination), hypotonia (low muscle tone), dystonia (muscle contractions), aggressiveness, irritability, neutropenia (reduced immunity).
Tiagabine	Gabitril: Tablets 5mg, 10mg, 15mg.	30mg - 45mg. Doses above 30mg should be divided into 3 doses a day.	Recommended in partial seizures where previous treatment has been ineffective. May make myoclonic seizures worse.	Dizziness, fatigue (tiredness), nervousness, tremor, concentration difficulties, depression of mood, agitation.
Topiramate	Topamax: Tablets 25mg, 50mg, 100mg, 200mg. Sprinkle capsules 15mg, 25mg, 50mg.	200mg - 800mg divided into 2 doses a day.	Recommended in partial seizures where previous treatment has been ineffective. Topiramate has a licence for monotherapy but is not widely used as a first line drug.	Headache, drowsiness, dizziness, paraesthesia (pins and needles in hands and feet), loss of weight and kidney stones. Speech disorder, impaired memory and concentration may occur when dose is increased but will usually disappear after a few days. Rare reported cases of acute visual impairment usually occurring within a month of starting treatment.
Vigabatrin	Sabril: Tablets 500mg. Powder (sugar free) 500mg/sachet.	1000mg - 4000mg divided into 1 or 2 doses a day.	Effective against partial seizures and secondarily generalised seizures where all previous treatment has been ineffective. See side effects. May worsen absences and myoclonic seizures.	Drowsiness, behaviour and mood changes. Psychotic reactions have been reported. Visual field defects have been reported in one in three people taking vigabatrin in the long term. Anybody who has concerns about this should talk with their GP and neurologist. Visual field tests should be done every six months if taking vigabatrin.
Zonisamide	Zonegran: 25mg, 50mg 100mg.	150mg - 600mg.	Effective against partial seizures with or without secondary generalisation.	Skin rash if allergic to zonisamide. Drowsiness, dizziness, weight loss, kidney stones, confusion, cognitive slowing, agitation, irritability, depression, speech disorder, very rarely some idiosyncratic (unusual or individual) reactions.

The side effects listed in this table are some of the possible side effects for each AED. For more details on each drug, and a complete list of their side effects log on to www.medguides.medicines.org.uk