<table>
<thead>
<tr>
<th>Generic/ TRADE NAME</th>
<th>SIDE EFFECTS</th>
<th>MONITOR</th>
<th>USES / COMMENTS / DRUG LEVEL</th>
<th>DRUG INTERACTIONS</th>
<th>INITIAL &amp; MAX DOSE</th>
<th>USUAL SEIZURE DOSE RANGE</th>
<th>$ /100day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamazepine (Tegretol)</td>
<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Generalized tonic-clonic seizures</strong></td>
<td><strong>Carbamazepine</strong>: level by: cinchocaine, furosemide, coumarin, phenytoin, phenobarbital, propylene glycol, verapamil &amp; valproate</td>
<td><strong>Carbamazepine</strong> level by: phenytoin, carbamazepine, clobazam, valproate, lamotrigine</td>
<td>100mg bid</td>
<td>200mg po tid</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200mg po tid</td>
<td>600mg po bid (some clinicians give regular release bid in selective situations)</td>
<td>400mg CR bid</td>
<td>97</td>
</tr>
<tr>
<td>Clozapine</td>
<td>Pregnancy</td>
<td><strong>Myoclonic seizures</strong></td>
<td><strong>Carbamazepine</strong> level by: phenytoin, carbamazepine, clobazam, valproate, lamotrigine</td>
<td><strong>Carbamazepine</strong> 4-6 levels of BCP's, 30-35mg/kg</td>
<td></td>
<td>10-20mg</td>
<td>5</td>
</tr>
<tr>
<td>Divalproex (Depakene)</td>
<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Absence Partial</strong>, <strong>Myoclonic</strong>, <strong>Myoclonic Absence</strong></td>
<td><strong>Valproic acid</strong>: level by: carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
<td><strong>Valproic acid</strong> 7 levels of BCP's, 40-50mg/kg</td>
<td>250-500mg po bid</td>
<td>500mg po bid cc</td>
<td>78</td>
</tr>
<tr>
<td>Diazepam</td>
<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Absence</strong>, <strong>Myoclonic</strong>, <strong>Myoclonic Absence</strong></td>
<td><strong>Ethosuximide</strong>: level by: carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
<td><strong>Ethosuximide</strong> level by: folic acid &amp; vitamin B12</td>
<td>250mg od/bid</td>
<td>500mg po bid cc</td>
<td>77</td>
</tr>
<tr>
<td>Lorazepam</td>
<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Partial</strong>, <strong>Myoclonic Absence</strong></td>
<td><strong>Gabapentin</strong>: level by: lamotrigine, carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
<td><strong>Gabapentin</strong> 7 levels of BCP's, 40-50mg/kg</td>
<td>250mg po tid</td>
<td>500mg po bid cc</td>
<td>147</td>
</tr>
<tr>
<td>Lamotrigine</td>
<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Mono-Partial</strong>, <strong>Myoclonic</strong></td>
<td><strong>Lamotrigine</strong>: level by: carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
<td><strong>Lamotrigine</strong> level by: BCP's, carbamazepine, carbamazepine, carbamazepine, lamotrigine, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
<td>25-50mg bid</td>
<td>500mg po bid cc</td>
<td>208</td>
</tr>
<tr>
<td>Ethosuximide</td>
<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Partial</strong>, <strong>Myoclonic Absence</strong></td>
<td><strong>Gabapentin</strong>: level by: lamotrigine, carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
<td><strong>Gabapentin</strong> 7 levels of BCP's, 40-50mg/kg</td>
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<td>CBC, Platelets, TSH, FT3, FT4, Levetiracetam</td>
<td><strong>Partial</strong>, <strong>Myoclonic Absence</strong></td>
<td><strong>Gabapentin</strong>: level by: lamotrigine, carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
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<td><strong>Partial</strong>, <strong>Myoclonic Absence</strong></td>
<td><strong>Gabapentin</strong>: level by: lamotrigine, carbamazepine, lamotrigine, valproic acid, phenobarbital, phenytoin, primidone, rifampin &amp; topiramate</td>
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<td>500mg po bid cc</td>
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500mg bid
↑ 1g/d q2week
500mg po bid
1000mg po bid
(1-3g/d)Peds:10-60mg/kg

420
800

Methsuximide
CELONTIN
(300mg cap)

Common: nausea, diarrhea, drowsiness, hiccups & headache.

Rage: skin rash, blood dyscrasias, lupus & behavioral changes especially in kids.

CBC,Platelets, LFT

Dose: for effectiveness

methsuximide’s % levels of phenobarbital, phenytoin & primidone
methsuximide’s % levels of lamotrigine
methsuximide’s levels by:
- carbamazepine, phenobarbital & phenytoin

300mg od
↑ 300mg/d qweek
1200mg/day

123
161

Oxcarbazepine
TRILEPTAL-500,1500mg cap;60mg/ml susp

Common: GI upset, sedation, diplopia, sodium ▼ 3% & rash. Prodrug of CBZ. Convert CBZ→ this drug by 1.5 x CBZ dose

As per CBZ

Mono-O Partial Sz in adults & ≤6yr

Similar Ds as per CBZ but less:
- (BPC’s levels ↓phenytoin levels T)
- Cross sensitivity with CBZ of 25%

150mg od
↑ 300-600mg qweek
60mg po bid
90mg po bid
(600-2400mg/d)Peds:8-10-50mg/kg
d

678
999

Nitrazepam
MOGADON/generic
(5,10mg tab)

Common: Drowsiness (tolerance develops), dizziness, anterograde amnesia, ▼ traffic accidents, dependence & paradoxical anger.

Rage: skin rash & thrombocytopenia.

Platelets

Phenobarbital
(15,30,60;100mg tab; 5mg/ml soln PO,IM,IV by Co; 30% , 120mg/ml amp)

Common: sedation, rash 5-10%, dizziness, ▼ concentration, drowsiness, somnolence, tremor, rash 5-10% (rarely serious), ↓ LFT, blood dyscrasias, gingival hyperplasia ~50%, nystagmus, ▼ body hair, ▼ folate & vitamin D levels & osteomalacia.

CBC,LFT Folate level

Partial seizures (1-12months)
neonatal Sz.

1% of CBZ.

2-8mg/kg/d
240mg/day

Peds:10-30mg/kg

30
25

Phenytoin
DILANTIN
(30,100mg cap;50mg chew tab; 6 & 25mg/ml susp; 100mg/2ml vial x 3)

Common: nausea, diarrhea, dizziness, ataxia, △ coordination, concentration, sedation, somnolence, tremor, rash 5-10% (rarely serious), ↓ LFT, blood dyscrasias, gingival hyperplasia ~50%, nystagmus, ▼ body hair, ▼ folate & vitamin D levels & osteomalacia.

CBC,LFT, LFT Folate level

Generalized tonic-clonic & Partial: (Not for absence Sz)
LD 15-20mg/kg IV @ 50min/mg

Phenytoin level by:
- cimetidine, valproate, carbamazepine, phenobarbital

60-90mg hs
↑ 30mg/d qmonth
240mg/day

60mg po bid
19

Pregnancy
C
Possible risk to fetus (evident in animals)

=possible risk to fetus (evident in animals)

=unknown. Risk

Avoid in 1st trimester.

= not applicable

SE

Carbamazepine
leval of:
- alprazolam, bupropion, clonazepam, cyclosporine, dexamethasone, diazepam, doxycycline, ethosuximide, feranyl, haloperidol, levethozetine, phenobarbital, phenytoin, pregancy tests, steroids, theophylline, triazolam, tricyclic drugs & warfarin.

Consider using ACTH

Pregnancy

= possible risk to fetus (evident in animals)

= fetal risk in humans unkown.

Risk if on multiple agents & T doses; try for monotherapy & ↓ serum levels (check levels each trimester). Try to avoid in 1st trimester. Vitr K is in last month.

= Consider alternative antiepileptic options since these are distinct generic products

= covered NHRB

= Risk: if stopping antiepileptic taper over 2-3 months, at least to ↓ risk of relapse seizures. Consideration for stopping antiepileptic if: Kids seizures free for 3-5yrs. Consider surgical options for refractory seizures.

= for 3-5yrs. Consider surgical options for refractory seizures.

= alternate BCP birth control pill CI—contraception CNS-central nervous system CR—control release DEN—diversion Dis—discontinue Ec—enteric coated LF—low dose LGS—Lamotrigine

≤30mg/kg/day

≥4-8mg/d

qweek

= 1g/d q2week

= 1,2-6-8mg/kg
d

= 2mg bid

= 4-8mg/d

qweek

= 1000mg po bid

= 200mg po bid

= 500mg po bid

= 1000mg po bid

= 16mg po bid

= 16mg po bid (32-56mg/kg)

= 0.25-1mg/kg
d

= 500mg po bid

= 1000mg po bid

= 30-100mg/kg

= 412
604
Antiepileptics- References: