

# Use of Lamictal in Psychiatric Practice

Eric Bai, DO

Trios Health, PGY-1

August 2014

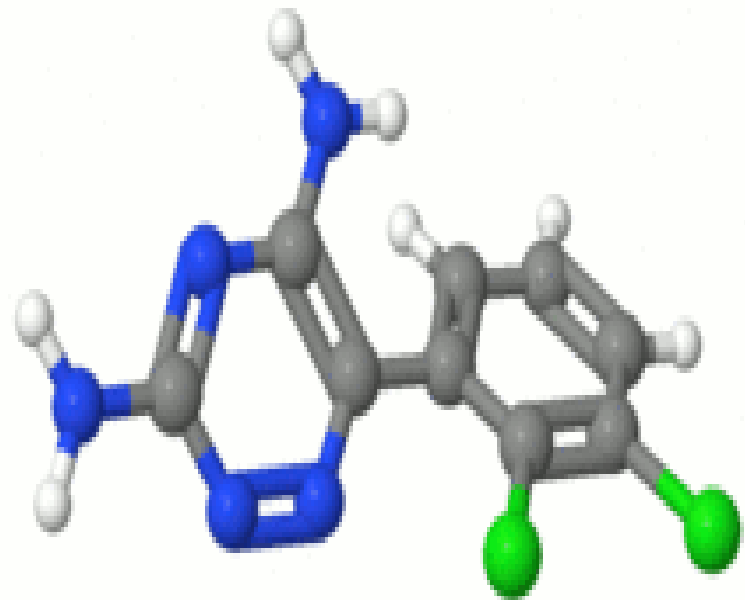


# Pharmacology

- Lamictal (Brand name of lamotrigine)
- Class: Mood Stabilizer, Anticonvulsant
- Indications:
  - Bipolar disorder (Bipolar I & II)
  - Seizures (partial seizures, tonic-clonic seizures & seizures of Lennox-Gastaut syndrome)
- Off label uses:
  - peripheral neuropathy, trigeminal neuralgia, cluster & migraine headaches, PTSD
- MOA:
  - Not clearly defined. Suspected role with inhibition of voltage gated Na channels and weak 5-HT<sub>3</sub> receptor inhibition
- Pregnancy Class C: risk of cleft palate

# Pharmacokinetics

- Metabolized by the liver via glucuronic acid conjugation to 2-n-glucuronide conjugate
- Eliminated via kidneys
- 25hr half-life
- Peak plasma levels 1.4-4.8hrs



# Adverse Side Effects & Drug Interactions

- Black Box Warning
  - Stevens Johnson Syndrome & Toxic Epidermal Necrolysis
    - [www.dermIS.net](http://www.dermIS.net)
- More Common side effects
  - dizziness, ataxia, somnolence, headache, diplopia, nausea, vomiting
- Pregnancy Class C: cleft palate
- Do not breastfeed
- Interaction with other psych meds
  - Depakote
  - Carbamazepine



# Initiating Therapy

- Indication:
  - Bipolar I or II, especially if patient in more of depressive state (can gauge with PHQ-9 Questionnaire)
- Discussion and education of patient about medication indications/risks/benefits
- Agreement of patient with initiation of therapy
- Baseline labs: CMP
  - may need adjustment for renal/hepatic impairment
- Other considerations:
  - Pregnancy Risk: med can cause cleft palate
  - Other medication interactions
    - Psych meds: Depakote, carbamazepine

## Management: “START LOW & GO SLOW”

- Taper schedule to avoid chance of SJS/TENS
  - Increase dose every 2 weeks
  - 25-50-100-200mg
  - Close monitoring for side effects
- Lamictal level after 7-10days at 200mg dose
  - Therapeutic : 2.5-15mcg/mL
- Dose adjustments based upon blood levels, symptoms, side effects
  - Symptoms of depression can be assessed with PHQ-9
- Every adjustment above 200mg should have corresponding blood level

## Additional Management Tips

- Should patient need to initiate Depakote for ceiling effect, reduce Lamictal dose to half of current dose due to interaction
- Educate patient on importance of compliance of this medication
  - Long taper schedule (8weeks) makes compliance a very important issue, might need to restart taper if patient missed more than 4 days of therapy
- If dose missed, do not double dose next day

# Pearls of Wisdom on Lamictal

- Great FLOOR drug for management of bipolar I & II disorder
- Advantages
  - weight stable, no sexual dysfunction
- Disadvantage
  - Little to no ceiling effect for bipolar disorder
- If used in conjunction with Depakote need to reduce Lamictal by half current dose then dial in with levels, symptoms and side effects
- Titration schedule 25-50-100-200 then increments of 100mg
- Biggest black box warning – SJS
- Dermatologic Reference: [www.dermIS.net](http://www.dermIS.net)
- Most common seen side effects in practice: GI dysfunction, tremors, diplopia, word-finding effects



## Other Information

- Generic: lamotrigine
- Manufacturer of Lamictal: Glaxo-Smith-Kline
- Pill Dosages
  - 25, 100, 200mg

Also available in extended release and chewable tablets



## References

Lamictal Uses, Dosage & Side Effects – Drugs.com (Lamictal Uses, Dosage, Side Effects – Drugs.com)

<http://www.drugs.com/lamictal.htm>

Lamictal (Lamotrigine) Drug Information: Description, User Reviews, Drug Side Effects, Interactions – Prescribing Information at RxList(RxList)

<http://www.rxlist.com/lamictal-drug.htm>

Lamictal – Epocrates Online (Epocrates)

<https://online.epocrates.com/u/101850/lamictal/adult+dosing>

DermIS – Stevens-Johnson Syndrome (image) (DermIS – Stevens-Johnson Syndrome (image))

<http://dermis.net/dermisroot/en51749/image.htm>