

## Background for Health Care Provider

Lamotrigine is almost completely absorbed from the small intestine and has 98% bioavailability in tablet, dispersible, and chewable forms. Food does not interact with its absorption. However, for best therapeutic outcomes patients should take the medication consistently with food or on an empty stomach. Once in the serum, lamotrigine is approximately 55% protein bound, so there are no clinically significant binding interactions with other drugs. Lamotrigine is metabolized predominantly in the liver by glucuronic acid conjugation (70-80%). Therefore, apparent clearance of lamotrigine is affected by the co-administration of drugs that induce or inhibit glucuronidation. Induction of glucuronidation will lead to decreased plasma lamotrigine levels, whereas inhibition will lead to increased levels. Ten percent of lamotrigine is cleared by the kidneys.

### Effect of Other Drugs on Lamotrigine Levels:

#### Decrease Lamotrigine Drug Levels

- Combined Oral Contraceptives
- Carbamazepine
- Phenobarbital
- Phenytoin
- Rifampin
- Ritonavir
- Acetaminophen

#### Increase Carbamazepine Drug Levels

- Valproic Acid
- Sertraline

### Effect of Lamotrigine on Other Drugs' Levels:

#### Increase Other Drug Levels

- No known clinically significant interactions

#### Decrease Other Drug Levels

- Valproic Acid

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