Atomoxetine (Strattera®)

Information about the Drug and Genetic Variation

What is Atomoxetine?

Atomoxetine is a norepinephrine reuptake inhibitor that is used to treat attention-deficit/hyperactivity disorder (ADHD) in both adults and children.

Genetic Variations

- The major gene involved in the inactivation atomoxetine is <u>CYP2D6.</u>
- There are a few <u>CYP2D6</u> variations that classify atomoxetine metabolism requiring the dose to be increased or decreased accordingly to the rate of inactivation of the drug (ultra rapid, normal, intermediate, poor).

Drug Gene Interaction

- The <u>CYP2D6</u> genetic variations can affect therapy by increasing or decreasing the levels of atomoxetine remaining in the body.
- **Ultra rapid metabolizers** of atomoxetine contain functional CYP2D6 gene variations that allow for atomoxetine to be metabolized (inactivated) at a faster rate than normal, therefore there is a lower level of the drug remaining in the body. Fast metabolizers may require a higher dose if there is an inadequate response to atomoxetine.
- **Poor metabolizers** of atomoxetine contain decreased functioning or non-functional variations of the CYP2D6 gene, resulting in a higher level of drug remaining in the body. Slower metabolizers of atomoxetine may require a lower dose to prevent potential side effects.

If you have any other questions, please visit the following websites or consult a healthcare professional. www.drugsandgenes.com www.pharmgkb.org www.lexicomp.com