

Doxepin (Silenor®)

Information about the drug and genetic variation

What is doxepin?

- Doxepin is a tricyclic antidepressant that is mainly used to treat mild depression and anxiety disorders.
- It is assumed that doxepin elevates the levels of norepinephrine and serotonin by preventing their removal from brain tissue, which is thought to help treat depression.

Genetic Variations

- The genes of interest are CYP2C19 and CYP2D6.
- Both genes produce an enzyme that eliminates it from the blood and can change the amount that reaches the target organ.
- Changing the amount of either protein may change how effectively an individual responds to doxepin.

Drug-Gene Interaction

- CYP2D6 poor metabolizers may have a reduced efficiency eliminating doxepin from the blood.
- Ultrarapid CYP2D6 metabolizers have increased clearance of doxepin and have low concentrations in the blood.
- Dose adjustments may be needed in response to how an individual metabolizes the drug.

If you have any more questions, please visit the website listed below or talk to a healthcare professional.

- <http://drugsandgenes.com/>
- <http://www.pharmgkb.org>