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Duloxetine Hydrochloride

National Cancer Institute

Source

National Cancer Institute. *Duloxetine Hydrochloride*. NCI Thesaurus. Code C65496.

The hydrochloride salt of duloxetine, a fluoxetine derivative belonging to the class of selective serotonin (5-HT) and norepinephrine (NE) reuptake inhibitors (SSNRIs) and exhibiting antidepressant activity. Duloxetine selectively prevents the reuptake of 5-HT and NE via transporter complexes on the pre-synaptic membrane, thereby increasing the level of these neurotransmitters within the synaptic cleft. As a result, this agent potentiates serotonergic and noradrenergic activities in the central nervous system, and alleviates depression and neuropathy sensations, such as pain and tingling. Furthermore, duloxetine does not show significant affinity for dopaminergic, adrenergic, cholinergic, histaminergic, opioid, glutamate, and gamma-aminobutyric acid (GABA) receptors.