

Selective Alpha-2 Blockers

Selective α_2 blockers are a class of drug which includes mirtazapine. This medication is indicated for depression treatment, though it has many off-label uses. It works by selectively blocking α_2 receptors, and having antagonist activity at 5-HT receptors, as well as other receptors. Mirtazapine has the side effects of sedation and increased serum cholesterol. A majority of patients develop weight gain while taking this drug as well.



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Mirtazapine

Martha-pine

Mirtazapine is an atypical antidepressant that blocks presynaptic α_2 receptors and also has serotonin 5-HT₂ and 5-HT₃ receptor antagonist activity.

Indications

Depression Treatment

Depressed-emo

Mirtazapine is indicated as a treatment for depression and other mood disorders.

Mechanism of Action

Blocks Alpha2 Receptor

Afro (2) Tutu Block-guy blocking receptor

This drug works by blocking α_2 agonists, which in turn leads to enhanced adrenergic and serotonergic transmission.

Antagonist at 5-HT receptors

Ant-toga pouring out Silver-tonic at 5-HT receptor

This drug is generally defined as a selective α_2 adrenergic receptor antagonist.

Side Effects

Sedation

Sedation-dart

Sedation is a common side effect that may occur, possibly due to the blockade of 5-HT₂ and 5-HT₃ receptors.

Weight gain

Up-arrow Scale

This drug is a potent stimulator of appetite and may cause weight gain, especially in younger patients.

Increased Serum Cholesterol

Up-arrow Cholesterol-burgers

Mirtazapine has been associated with increases in serum cholesterol and triglyceride levels.