

## Low Potency Antipsychotic Drugs

Low potency antipsychotics are typical antipsychotic drugs which are more favorable to some patients due to their low potency. Their decreased potency when compared to other antipsychotics allow patients to control daily dosing with more freedom. Chlorpromazine and thioridazine are two antipsychotic drugs used within this sub-class, and are indicated for schizophrenia, mania, psychosis and anxiety. These drugs block dopamine  $D_2$  receptors in the mesolimbic and mesocortical areas of the CNS. This leads to an increase of the intracellular concentration of the second messenger cyclic adenosine monophosphate (cAMP). Thioridazine use leads to retinal deposits, while chlorpromazine is deposited in the cornea and is phototoxic. After sunlight exposure it can lead to blindness or corneal pigmentation. Both drugs have  $\alpha_1$ -blockade effects, which can lead to hypotension and anorgasmia. These low potency antipsychotics also have anticholinergic effects, and can lead to dry mouth, urination difficulty, obstipation, induction of glaucoma, postural hypotension, and sinus tachycardia. Though these drugs are of low potency, they are typical antipsychotic drugs and can still lead to extrapyramidal symptoms or neuroleptic malignant syndrome.



PLAY PICMONIC

### Drugs

#### Chlorpromazine

##### Color-pro

Chlorpromazine is a low potency antipsychotic which is used with psychosis, schizophrenia and manic episodes. This drug has the side effect of hypotension and also has anti-histamine properties, which counteract the extrapyramidal symptoms experienced with antipsychotics.

#### Corneal Deposits

##### Corn-eyes Filled

Chlorpromazine is accumulated in the corneal stroma of the eye. After light exposure, cellular damage occurs, as the drug is a phototoxic compound. This may lead to color-blindness and benign pigmentation of the cornea.

#### Thioridazine

##### Thor-daisy

Thioridazine is an antipsychotic medication typically used to treat schizophrenia and psychosis. It is a low potency antipsychotic and has very serious adverse effects. This drug can lead to extrapyramidal symptoms, neuroleptic malignant syndrome, impotence and autonomic side effects.

#### Retinal Deposits

##### Red-tin Filled

Thioridazine can lead to retinal deposits in patients.

### Shared Side Effects

#### Alpha1 Antagonist Effects

##### Afro (1) Wand Ant-toga

The  $\alpha_1$  antagonist effects of these medications may lead to hypotension, and rarely, impotence or anorgasmia.

## Anticholinergic Effects

### Ant-tie-cola

Anti-cholinergic effects, such as dry mouth, urination difficulty, obstipation, induction of glaucoma, postural hypotension, and sinus tachycardia may occur. However, these are seen less often than with most other mildly potent antipsychotics.