

# Olanzapine

## General:

Olanzapine is structurally similar to clozapine, and is classified as a thienobenzodiazepine. It has a higher affinity for 5-HT<sub>2</sub> serotonin receptors than D<sub>2</sub> dopamine receptors.

Like most atypical antipsychotics, compared to the older typical ones, olanzapine has a lower affinity for histamine, cholinergic, muscarinic and alpha adrenergic receptors. The mode of action of olanzapine's antipsychotic activity is unknown. It may involve antagonism at serotonin receptors. Antagonism of dopamine receptors is associated with extrapyramidal effects such as tardive dyskinesia, and with therapeutic effects. Antagonizing H<sub>1</sub> histamine receptors causes sedation and may cause weight gain, although antagonistic actions at 5-HT<sub>2C</sub> receptors have also been implicated in weight gain. Following tests are available:

Atypical antipsychotics have a risk of developing hyperglycemia and diabetes, both of which are factors in the metabolic syndrome. These effects may be related to the drug's ability to induce weight gain, although there are some reports of metabolic changes in the absence of weight gain.

Indication: Therapy monitoring

Material: 1 ml serum

TAT: 5-7 days\*

Method: LCMS

Units: µg/l

Ref.- range: 20 - 80

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>