

# Preloc®

Metoprolol Tartrate USP

## Description

**Preloc®** is the Metoprolol Tartrate preparation, a selective  $\beta_1$ -adrenergic antagonist.

## Mode of action

Metoprolol Tartrate is a beta-adrenergic receptor blocking agent. It has a preferential effect on  $\beta_1$ -adrenoreceptors, chiefly located in cardiac muscle. Due to beta-blocking activity, Metoprolol shows reduction in heart rate and cardiac output at rest and upon exercise, reduction of systolic blood pressure upon exercise, inhibition of isoproterenol-induced tachycardia, and reduction of reflex orthostatic tachycardia.

## Pharmacokinetics

Absorption of Metoprolol tartrate is rapid and complete. Plasma levels following oral administration, however, approximate 50% of levels following intravenous administration, indicating about 50% first-pass metabolism. Only a small fraction of the drug (about 12%) is bound to serum albumin. Elimination is mainly by biotransformation in the liver, and the plasma half-life ranges from approximately 3 to 7 hours. Less than 5% of an oral dose of Metoprolol Tartrate is recovered unchanged in the urine. Significant beta-blocking effect (as measured by reduction of exercise heart rate) occurs within 1 hour after oral administration, and its duration is dose-related.

## Composition

**Preloc® 50 Tablet:** Each tablet contains Metoprolol Tartrate USP 50 mg.

## Indications

- Hypertension
- Angina
- Cardiac Arrhythmias
- Myocardial Infarction
- Migraine Prophylaxis
- Thyrotoxicosis

## Dosage & administration

**Hypertension:** Initially 100 mg daily, for maintenance, 100 - 200 mg daily in 1-2 doses.

**Angina:** 50-100 mg 2-3 times daily.

**Cardiac Arrhythmias:** Usually 50 mg 2-3 times daily up to 300 mg daily in divided doses, if necessary.

**Myocardial Infarction:** If patient can not tolerate IV doses then he/she should be switched to oral treatment. Starting dose for such patient is 25 mg tablets 6

hourly for 48 hours.

**Heart Failure:** 12.5-25 mg once daily. Dose is increased at intervals of 2 weeks, to a maximum of 200 mg once daily.

**Migraine Prophylaxis:** 100-200 mg daily in divided doses.

**Thyrotoxicosis:** 50 mg 4 times daily.

## Contraindications

Metoprolol Tartrate is contraindicated in sinus bradycardia, heart block greater than first degree, cardiogenic shock, and overt cardiac failure.

## Side effects

Bradycardia, heart failure, bronchospasm, peripheral vasoconstriction, gastro-intestinal disturbances etc.

## Use in pregnancy & lactation

This drug should be used during pregnancy only if clearly needed. Metoprolol Tartrate is excreted in breast milk in very small quantity. Caution should be exercised when Metoprolol Tartrate is administered to a nursing woman.

## Precaution

Abrupt withdrawal in angina should be avoided. Initial dose in renal impairment and oral dose in liver disease should be reduced.

## Drug interactions

Patients treated with Metoprolol Tartrate plus a catecholamine depletor should be closely observed for evidence of hypotension or marked bradycardia, which may produce vertigo, syncope, or postural hypotension.

## Overdosage

Potential signs and symptoms associated with overdosage with metoprolol tartrate are bradycardia, hypotension, bronchospasm, and cardiac failure.

## Storage

Store in a cool and dry place, protected from light.

## Packaging

**Preloc® 50 Tablet:** Each carton contains 10X5 tablets in blister pack.



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