

Metoprolol (Lopressor)

Classification:

- **Beta Antagonist**

Indications:

- **Hypertension**
- **Refractory and recurrent V-fib/tachycardia**
- **Narrow complex tachycardia**

Summary:

Metoprolol is a B1 selective beta antagonist and reduces sympathetic stimulation of the heart resulting in decreases in heart rate, cardiac output, and AV conduction. Metoprolol reduces myocardial O2 consumption. Metoprolol is classified as a class 2 antiarrhythmic agent. Just like other cardio selective beta antagonist, Metoprolol loses its cardioselectivity at higher doses and will inhibit B2 receptors. Metoprolol is used in the chronic management of angina, hypertension, tachyarrhythmias, and heart failure. Acutely, Metoprolol is used for ventricular rate control, hypertension, and thyrotoxicosis. It may also be used in the management of recurring RVR or tachycardia. The onset of action is within 5 minutes with peak effect within 1 hour.

Contraindications:

- **Known hypersensitivity**
- **Heart rate <60**
- **AV Block >1 degree in the absence of a pacemaker**
- **Hypotension (SBP <100 mmhg)**
- **Acute decompensated heart failure**

Significant adverse reactions/Side effects:

- **Hypotension**
- **Bradycardia**

- AV Block
- Dizziness
- Bronchospasm
- Heart Failure

Precautions:

1. Metoprolol should be used cautiously in combination with other nodal agents such as Diltiazem and this should be avoided whenever possible.
2. In Hypoglycemia the Sympathetic Nervous System stimulates an increase in Blood Glucose via B receptors. Antagonism of B receptors will result in the Blood Glucose remaining low. Antagonism of the B receptors will also suppress the sympathetic signs associated with Hypoglycemia.
3. The hypotensive effects of Metoprolol may be enhanced in patients receiving Amiodarone or Antihypertensive agents.
4. Metoprolol may enhance the CNS depressive effects of Benzodiazepines.

Administration:

- IV Push followed with 10cc NS Flush

Dosage:

- 5 mg q 5 minutes as needed not to exceed 20 mg total dosage

Approved and attested by:

Medical Director, Dr. John Lloyd M.D.

Date: 09/30/2025

Amerimed Authorized Representative, Rick Huskey, RVP

Date: 9-30-2025