

Metoprolol (Lopressor, Toprol-XL) Considerations for Use*

US/FDA Approved Indication: Heart Rate Control for Atrial Fibrillation

Black Box Warning*	Abrupt cessation may exacerbate angina pectoris and MI.
Mechanism of Action	Blocks binding of catecholamines to beta-1 receptors; Beta-1 selective
Dosing†	<p><u>Acute setting:</u> 2.5 to 5 mg IV bolus over 2 minutes; may repeat every 5 minutes to a maximum dose of 15 mg</p> <p><u>Non-acute setting or maintenance:</u> Metoprolol tartrate (immediate-release): 25 to 100 mg PO twice daily Metoprolol succinate (extended-release): 25 to 200 mg daily</p> <p><u>Elderly:</u> May need lower doses</p> <p><u>Hepatic Impairment:</u> May need lower doses</p> <p><u>Renal Impairment:</u> No dosage adjustment needed</p>
Contraindications	<ul style="list-style-type: none"> • AV block • Bradycardia • cardiogenic shock • decompensated heart failure • sick sinus syndrome • pheochromocytoma
Major Side Effects	hypotension, heart block, bradycardia, bronchospasm, HF
Dosage forms and Strengths	<p><u>PO:</u> 25 mg, 50 mg, 100 mg immediate-release tablets (tartrate) 25 mg, 50 mg, 100 mg, 200 mg extended-release tablets (succinate)</p> <p><u>IV:</u> 5 mL ampules (1 mg/mL)</p>
Special Notes	<p>Abrupt cessation may precipitate angina, MI, arrhythmias, or rebound HTN; discontinue by tapering over 1-2 weeks.</p> <p>Immediate-release form is metoprolol tartrate; extended-release form is metoprolol succinate. When switching from immediate release to extended-release product, use same total daily dose. The immediate and extended release products may not give same clinical response on mg:mg basis; monitor response and side effects when interchanging between metoprolol products.</p> <p>Concomitant amiodarone, digoxin, disopyramide, or non-dihydropyridine calcium channel blockers may increase the risk of bradycardia.</p> <p>Monitor closely for HF exacerbation and hypotension when titrating dose.</p>
Counseling	<p>Do not abruptly discontinue without physician's advice.</p> <p>Take with food or directly after eating.</p> <p>Extended-release tablets may be broken in half, but do not chew or crush.</p>

*Refer to prescribing information for more complete information.

†Dosages given in the table may differ from those recommended by the manufacturers.

Sources:

1. American College of Cardiology (ACC), American Heart Association (AHA), and the European Society of Cardiology (ESC). *ACC/AHA/ESC 2006 Guidelines for the Management of Patients With Atrial Fibrillation*. Washington, DC: American College of Cardiology.
2. Heart Rhythm Society. *AF360 Pocket Guide: Practical Rate and Rhythm Management of Atrial Fibrillation*. 2010, Washington, DC: Heart Rhythm Society.
3. *Tarascon Pocket Pharmacopoeia*®2012.