Medication Management in Patients Post-Myocardial Infarction

Cardiovascular (CV) disease remains the leading cause of death in the United States, with one American experiencing a myocardial infarction (MI) approximately every 40 seconds.[1] In addition to lifestyle modifications, the American College of Cardiology Foundation and American Heart Association guidelines for ST-Elevation Myocardial Infarction (STEMI) and Non-ST-Elevation Acute Coronary Syndromes (NSTE-ACS) recommend specific therapies for secondary prevention of CV events.[2-3] The following routine medical therapies are recommended indefinitely unless otherwise stated:

Formulary Treatment Options for Management of Patients Post-MI[2-4]

Drug Category	Generic Name (Brand Name)	Target Dose	Clinical Justification
Salicylates	aspirin (Ecotrin)	81 mg once daily	• Reduce risk of MI, stroke and CV death by reducing platelet aggregation.
$P2Y_{12}$ inhibitors	clopidogrel (Plavix)	75 mg once daily	• Reduce thrombosis risk by preventing platelet aggregation. • DAPT ($P2Y_{12}$ inhibitor in addition to aspirin) is recommended for up to one year. ○ Continuation of DAPT beyond one year may be considered in patients undergoing stent implantation. • Place in therapy in NSTE-ACS: ○ Ticagrelor is preferred over clopidogrel in patients who undergo early invasive or ischemia-guided strategy. ○ Prasugrel is preferred over clopidogrel in patients who undergo PCI and are not at high risk of bleeding.
	prasugrel (Effient)	5–10 mg once daily	
	ticagrelor (Brilinta)	90 mg twice daily	
Beta blockers	atenolol (Tenormin)	100 mg once daily	• Reduce mortality and morbidity by reducing cardiac mortality, sudden death and reinfarction. • Bisoprolol, carvedilol or metoprolol succinate are preferred in patients with HF and systolic dysfunction. • Treatment course: 3 years. • Metoprolol tartrate twice daily can be switched to metoprolol succinate ER once daily with the same total daily dose.
	bisoprolol (Zebeta)	10 mg once daily	
	carvedilol (Coreg)	25 mg twice daily	
	metoprolol tartrate (Lopressor)	100 mg twice daily	
	metoprolol succinate ER (Toprol XL)	200 mg once daily	
ACE-i	benazepril (Lotensin)	40 mg once daily	• Reduce fatal and nonfatal major CV events by lowering preload and afterload through inhibition of the renin-angiotensin-aldosterone system. • Consider ARB therapy if ACE-i intolerant.
	enalapril (Vasotec)	40 mg once daily	
	lisinopril (Zestril)	40 mg once daily	
ARB	irbesartan (Avapro)	300 mg once daily	
	losartan (Cozaar)	100 mg once daily	
	telmisartan (Micardis)	80 mg once daily	
	valsartan (Diovan)	160 mg twice daily	
Statins	atorvastatin (Lipitor)	40–80 mg once daily	• High-intensity statins reduce major ASCVD events in patients 75 years or younger. • For patients over 75 years, a moderate- or high-intensity statin is recommended.
	rosuvastatin (Crestor)	20–40 mg once daily	
Nitrates	nitroglycerin (Nitrostat)	0.4 mg SL every five min. as needed for chest pain (up to three doses)	• Reduce ischemic anginal symptoms as needed in patients with NSTE-ACS with recurrent ischemic pain.

DAPT= dual antiplatelet therapy; PCI = percutaneous coronary intervention; HF = heart failure; HTN = hypertension; ACE-i = angiotensin-converting enzyme inh bitors; ARB = angiotensin II receptor blockers; ASCVD = atherosclerotic cardiovascular disease; SL = sublingually

References

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2. O'Gara P, Kushner F, Ascheim D, et al. 2013 ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction. *Circulation*. 2013;127:e362-e425.
3. Amsterdam E, Wenger N, Brindis R, et al. 2014 AHA/ACC Guideline for the Management of Patients with Non-ST-Elevation Acute Coronary Syndromes. *Circulation*. 2014;130:e344–e426.
4. Grundy S, Stone N, Baley A, et al. 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Blood Cholesterol. *J Am Coll Cardiol.* 2019;73(24):e285–e350.

Medi-Cal Rx Contract Drug List: https://medi-calrx.dhcs.ca.gov/home/cdl/
OneCare Formulary: www.caloptima.org/en/ForProviders/PharmacyInformation/OneCareMedicarePartD.aspx