

Medications^{4,5,12,14–16, 34}

Drug class	Agent	Starting dose	Target dose	ODB coverage	NIHB coverage	Benefits in HFrEF	Harms and monitoring	Parameters for initiation	Laboratory and clinical monitoring (within 1-2 wks of initiation)	When to consider dose reduction/discontinuation
ARNi	Sacubitril-valsartan ¹⁷	50-100 mg BID (50 mg strength includes 24.3 mg sacubitril and 25.7 mg valsartan; 100 mg strength includes 48.6 mg sacubitril and 51.4 mg valsartan)	200 mg BID (200 mg strength includes 97.2 mg sacubitril and 102.8 mg valsartan)	LU 497	LU	↓ CV mortality or HF hospitalization ↓ CV mortality ↓ HF hospitalization ↓ All-cause mortality ↓ HF symptoms	Closely monitor BP for symptomatic hypotension Electrolytes for hyperkalemia Renal function for elevated creatinine Acute kidney injury, angioedema, cough, dizziness and diuretic dosing for hypovolemia	HFrEF NYHA II-IV SBP > 100 mmHg eGFR > 30 mL/min K+ < 5.2mmol/L	BP HR Symptomatic hypotension SCr K+ Blood urea nitrogen	Symptomatic hypotension SCr > 30% increase and CKD depending on eGFR and specific ARNi/ACEi/ARB K+ > 5.4 mmol/L Acute illness (SADMANS medication) Child-Pugh B or C Symptoms or history of angioedema, pregnancy, renal artery stenosis
OR ACEi	Enalapril ¹⁸	1.25-2.5 mg BID	10 mg BID/20 mg BID in NYHA IV	Yes	Yes	↓ CV mortality ↓ HF hospitalization ↓ HF symptoms	Monitor BP for symptomatic hypotension Electrolytes for hyperkalemia Renal function for elevated creatinine Acute kidney injury, angioedema and cough	HFrEF NYHA I-IV SBP > 100 mmHg K+ ≤ 5.5 eGFR >30ml/min (caution below < 30 mL/min) Post MI + EF <40% Perindopril is suggested for older adults due to safety advantages		
	Lisinopril ¹⁹	2.5-5 mg daily	20-35 mg daily	Yes	Yes					
	Perindopril ²⁰	2-4 mg daily	4-8 mg daily	Yes	Yes					
	Ramipril ²¹	1.25-2.5 mg BID	5 mg BID	Yes	Yes					
	Trandolapril ²²	1-2 mg daily	4 mg daily	Yes	Yes					
OR ARB	Candesartan ²³	4-8 mg daily	32 mg daily	Yes	Yes	↓ CV mortality or HF hospitalization ↓ CV mortality ↓ HF hospitalization ↓ All-cause mortality	Closely monitor BP for symptomatic hypotension Risk of orthostatic hypotension Electrolytes for hyperkalemia Renal function for elevated creatinine Acute kidney injury, angioedema and cough	ACEi intolerant HFrEF NYHA I-IV SBP > 100 mmHg K+ ≤ 5.5 eGFR >30ml/min (caution below < 30 mL/min) Post MI + EF <40%		
	Valsartan ²⁴	40 mg BID	160 mg BID	Yes	Yes					
Beta-blocker	Carvedilol ²⁵	3.125 mg BID	25 mg BID/50 mg BID (>85 kg)	LU 183	Yes	↓ All-cause mortality ↓ HF hospitalization	Monitor renal function, heart rate, BP, transient fluid retention, fatigue	HR > 60 bpm SBP > 100 mmHg	HR SBP No lab work required	HR < 50 bpm Symptomatic hypotension (carvedilol is more likely to lower BP because of its alpha-blocking activity)
	Bisoprolol ²⁶	1.25 mg daily	10 mg daily	Yes	Yes					
MRA	Spirolonactone ²⁷	12.5 mg daily	25-50 mg daily	Yes	Yes	↓ All-cause mortality ↓ CV mortality ↓ HF hospitalization	Closely monitor potassium, renal function, diuretic dosing	SBP > 100 mmHg eGFR > 30 mL/min K+ ≤ 5.4mmol/L	Symptomatic hypotension SCr K+	Symptomatic hypotension K+ > 5.4 mmol/L SCr > 30% increase within 4 wks of initiation
	Eplerenone ²⁸	25 mg daily	50 mg daily	LU 458	LU					
SGLT2i	Dapagliflozin ²⁹	10 mg daily	10 mg daily	Yes	Yes	For patients with or without concomitant type 2 diabetes: ↓ HF symptoms ↑ Quality of life ↓ CV mortality ↓ HF hospitalization	Closely monitor renal function, electrolytes, BP, genital mycotic infections, risk of hypoglycemia (not a significant concern unless patients have diabetes and are taking sulfonylureas or insulin)	SBP > 100 mmHg eGFR > 25 mL/min	Symptomatic hypotension SCr Glycemic control (if diabetes) Serum/urine ketones and lactate (if presenting in acute decompensation) Genital mycotic infection	Symptomatic hypotension SCr > 30% increase within 4 wks of initiation Development of ketones or elevated lactate if presenting acutely decompensated
	Empagliflozin ³⁰	10 mg daily	10-25 mg daily	Yes	Yes					
	Canagliflozin ³¹	100 mg daily	100-300 mg daily	Yes	Yes					