

Medicines and when should they be prescribed

MEDICINES	INDICATION	Impr Symp	Decr Hosp	Decr Mort
ACE Inhibitor	- NYHA I - IV. - Only medicine proved benefit in NYHA I. - First medicine to start.	Y	Y	Y
Beta Blocker	- NYHA II - IV. - Do not start in unstable patients. - Should start early but not before ACEI.	Y	Y	Y
Aldosterone Antagonist	- NYHA (III) IV in RALES study (Spironolactone) - Recent MI with heart failure in EPHEBUS study (Eplerenone)	Y	Y	Y
Angiotensin II Receptor Blocker	- Substitute for patients that cannot use ACEI. - Benefit when add to ACEI, beta blocker and aldosterone (CHARM, 2003)	a	a	a
Hydralazine+ISDN	- Substitute for patients that cannot use ACEI and ARB.	Y	.	Y
Diuretic	- NYHA II - IV - For symptomatic patients with fluid retention.	Y	Y	b
Digitalis	- NYHA II -III (IV) - For symptomatic patients already on ACEI, beta blocker and diuretic.	Y	Y	.
Antiarrhythmic Agent	- Amiodarone, (some) beta blocker, and dofetilide do not have deleterious effect on depressed LV systolic function.	.	.	.
Anticoagulation	- No conclusive recommendation for patients with EF <30%. - Usual indications i.e., atrial fibrillation, history of systemic emboli.	.	.	.
Calcium Channel Blocker	- No indication for heart failure treatment. - Only amlodipine and felodipine do not have deleterious effect on depressed LV systolic function.	.	.	.
Medicines not recommend	- NSAIDs, Cox 2 inhibitors, Class 1A and 1C antiarrhythmic agents, calcium channel blocker except amlodipine and felodipine, glitazones (avandia and actose in Heart failure with fluid retention, cardiotoxic agents. -Others include corticosteroid, lithium, tricyclic antidepressants.			

a = Appears to have similar result and not better than ACEI.

b = Essential for treatment of fluid retention, but no study on mortality to date.

	I	II	III	IV
IV Inotropic
Digitalis	.	.	.	1
Diuretic
Aldosterone antagonist	.	.	.	2
Beta blocker	3	.	4	.
ARB	.	.	5	.
ACE Inhibitor

1. Digitalis should not be started during this NYHA class. **2.** Spironolactone adds to ACEI, Beta blocker (RALES Trial). May prescribe Eplerenone soon after MI with heart failure (EPHEBUS Trial)). **3.** Prescribe after acute MI with or without heart failure symptoms. **4.** Add to ACEI. Do not have to wait until reach ACEI target dose. **5a.** Prescribe when patient is intolerable or contraindicate to ACEI. **5b.** Add to ACEI, Beta blocker. (CHARM, 2003)