HFrEF Treatment

ACE Inhibitor *or* ARB *or* ARNI

AND Evidence based Beta Blocker

AND Aldosterone Antagonist (CrCl >30 ml/min, K^+ <5)

Initiate loop diuretic

(dose prn or daily as clinically indicated)

Titrate ACE/ARB/ARNI, BB, Aldosterone Antagonist to target doses as clinically tolerated

Continue diuretic prn or daily

Follow up symptoms q1-6 months and prn

	Starting Dose	Target Dose
ARNI: **starting dose and timing dependent on current ACE/ARB dose*		
Sacubitril/Valsartan (Entresto®)	24/26mg twice daily	97/103mg twice daily
ACE Inhibitors		
Enalapril	2.5mg twice daily	10mg twice daily
Lisinopril	2.5mg once daily	20-40mg once daily
Captopril	6.25mg three times daily	50mg three times daily
ARBs		
Valsartan (Diovan®)	20-40mg twice daily	160mg twice daily
Candesartan (Atacand®)	4-8mg once daily	32mg once daily
Losartan (Cozaar®)	25mg once daily	50-100mg once daily
Evidence Based Beta Blockers		
Bisoprolol	2.5mg once daily	10mg once daily
Carvedilol (Coreg®)	3.125mg twice daily	25mg twice daily
Metoprolol Succinate (Toprol XL®)	12.5-25mg once daily	200mg once daily
Aldosterone Antagonist		
Spironolactone	12.5-25mg once daily	25-50mg once daily
Eplerenone (Inspra®)	12.5-25mg once daily	25-50mg once daily

HFrEF Subsequent Treatment

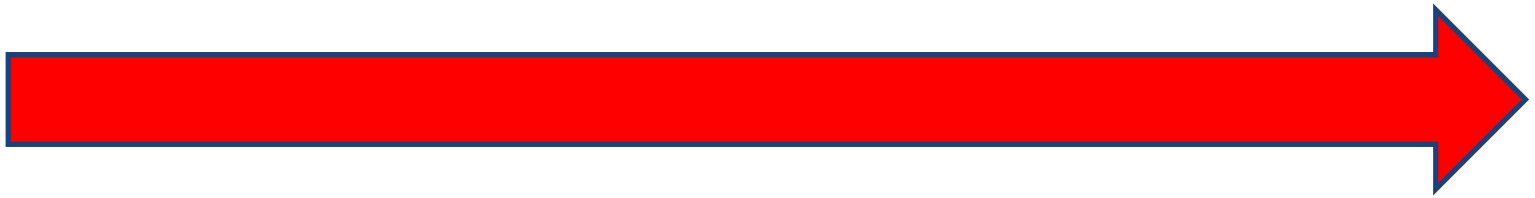
If persistent symptoms, continue to add as appropriate (Begin → End)

Add Hydralazine/ISDN (decrease mortality): self-identified African American or contraindication to ACE/ARB/ARNI

Add Ivabradine (Corlanor®) (decrease time to hospitalization): HR >70 on max tolerated BB and in normal sinus rhythm

Consider addition of Digoxin if patient w/ symptoms despite above therapies or if comorbid atrial fibrillation. Use low dose, ensure K^+ and Mg^+ are WNL

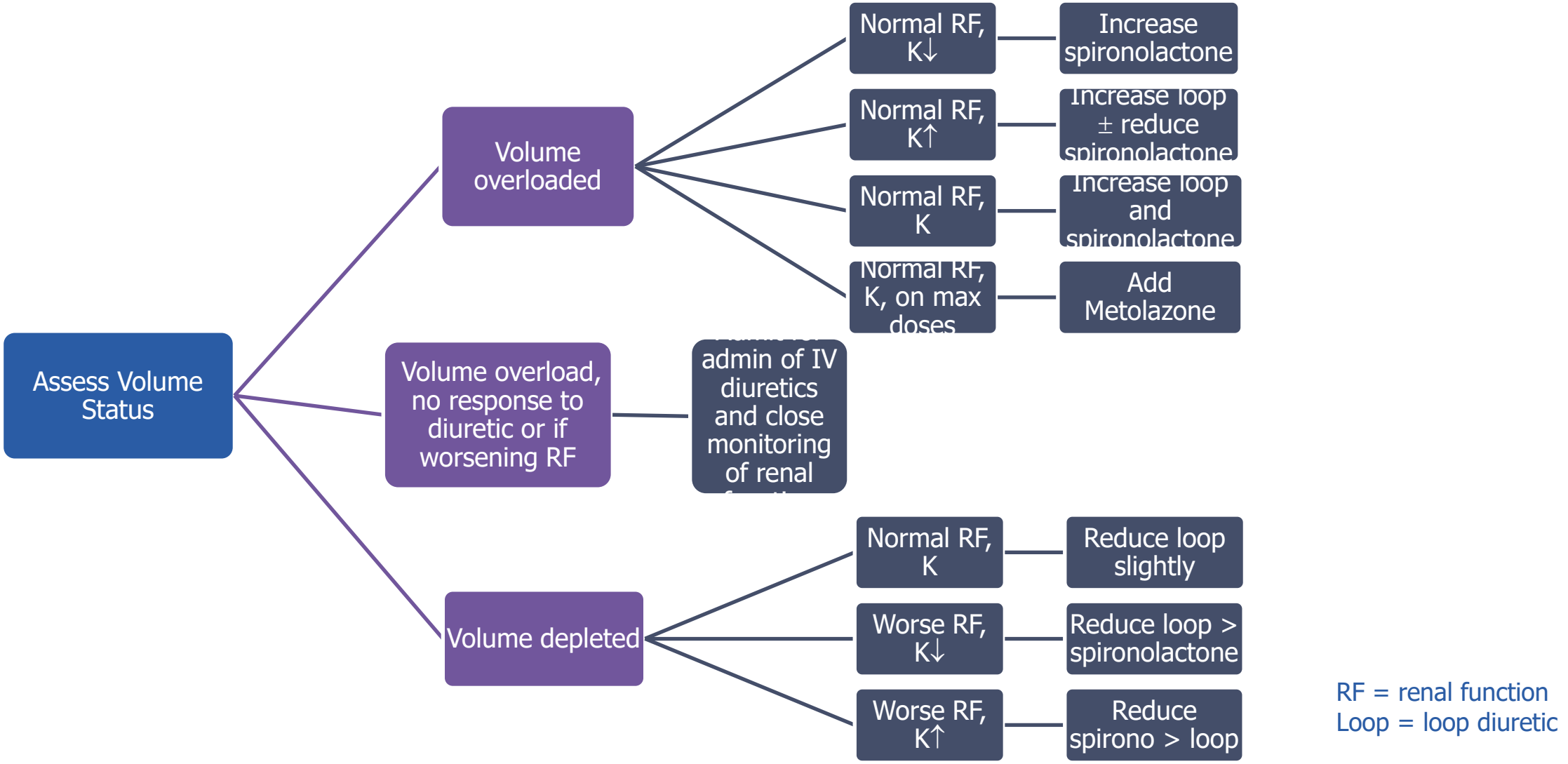
Consider Vericiguat (Verquvo®)(decrease CV death & HF hospitalization): eGFR >15 ml/min, EF <45%, contraindicated in pregnancy



HF Treatment

- HFrEF:
  - Begin with volume management using aldosterone antagonists w or w/o loop diuretics as needed
  - Initiate Guideline Directed Medical Therapy (GDMT) – 4 mainstays
    - Beta blockers (metoprolol succinate, carvedilol, bisoprolol), and ARNI/ACEI/ARB for all unless contraindicated
      - » Titrate to target dose, even if symptoms are stable/improving
      - » Get BP as low as tolerated without orthostasis. BP target 70bpm or less
    - Add SGLT2 inhibitor: Dapagliflozin (Farxiga®) & Empagliflozin (Jardiance®) are approved for HFrEF
- HFpEF:
  - Start with loop diuretics for volume management. If significant edema despite loop, add aldosterone if eGFR/K+ normal
  - Get BP and HR as low as tolerated – use beta blockers, diltiazem, verapamil (rate -70 is target) as well as ACEI/ARB and consider nitrates, hydralazine (BP)
  - Add SGLT2 Inhibitor (Empagliflozin (Jardiance®) is FDA approved, Dapagliflozin (Farxiga®) is widely accepted)
- Treat all comorbidities to goal (HTN, arrhythmias, diabetes, pulmonary conditions, sleep apnea, etc.)
- Counseling, education: salt restriction, fluid restriction (if hyponatremic) and other strategies based on conditions (smoking cessation, weight optimization, glucose control, etc.)

Acute Treatment to Avoid Hospitalization: Volume Status Management



RF = renal function
Loop = loop diuretic