2022 AHA/ACC/HFSA Heart Failure Guideline: Key Perspectives – American College of Cardiology

HFpEF LVEF > 50%

HFrEF LVEF <40%

Drugs:

- *** **ARNi (Sacubitril/Losartan) / ARB / ACEi** ***
- **Beta blocker**
- **Mineralocorticoid receptor antagonists**
- *** **SGLT2i** ***
- **+/- Diuretics**

#458 Heart Failure with Reduced Ejection Fraction – The Curbsiders

#460 Heart Failure with Preserved Ejection Fraction – The Curbsiders

The following are key perspectives from the 2022 American Heart Association (AHA)/American College of Cardiology (ACC)/Heart Failure Society of America (HFSA) Guideline for the Management of Heart Failure:

1. Heart failure (HF) encompasses a broad range of left ventricular (LV) function. New treatment guidelines address the entire spectrum of HF. The classification of HF is as follows: HFrEF (HF with reduced ejection fraction [EF]): LVEF ≤40%; HFimpEF (HF with improved EF): Previous LVEF ≤40% and follow-up measurement of LVEF >40%; HFmrEF (HF with mildly reduced EF): LVEF 41-49%; HFpEF (HF with preserved EF): LVEF ≥50%. All patients with current or prior HF, irrespective of EF, should be considered for guideline-directed medical therapy (GDMT).
2. GDMT has expanded to include four classes: 1) renin-angiotensin system inhibition (RASi) with angiotensin receptor-neprilysin inhibitors (ARNi), angiotensin-converting enzyme inhibitors (ACEi), or angiotensin (II) receptor blockers (ARB) alone; 2) beta blockers; 3) mineralocorticoid receptor

antagonists (MRA); and 4) sodium-glucose cotransporter-2 inhibitors (SGLT2i). ARNi is now recommended as first-line RASi to reduce morbidity and mortality in HFrEF (Class of Recommendation 1a). ACEi is recommended when ARNi is not feasible, and ARB in those who are ACEi intolerant and when ARNi is not feasible. In symptomatic patients with HFrEF who tolerate ACEi or ARB, replacement with ARNi is recommended for further reduction in morbidity and mortality.

3. New recommendations were made for the use of SGLT2i in HF. In symptomatic patients with chronic HFrEF, SGLT2i is recommended to reduce hospitalization and cardiovascular mortality, regardless of the presence of type 2 diabetes (Class of Recommendation 1a). SGLT2i can also be beneficial in patients with HFmrEF and HFpEF (Class of Recommendation 2a).
4. While there is little data to guide management of patients with HFimpEF, a small, randomized trial (TRED-HF) demonstrated a high rate of relapse of dilated cardiomyopathy (44%) within 6 months of discontinuation of GDMT. Therefore, it is recommended that GDMT be continued in patients with HFimpEF, including those who are asymptomatic, to prevent relapse of HF and LV dysfunction.
5. High value therapies (<$60,000/quality-adjusted life year gained) include ARNi, ACEi, ARB, beta blocker, MRA, hydralazine and isosorbide dinitrate in African Americans, implantable cardioverter-defibrillator (ICD), and cardiac resynchronization therapy (CRT), while SGLT2i and cardiac transplantation are of intermediate value. Tafamadis for amyloid was identified as low value (>$180,000/quality-adjusted life year gained), while mechanical circulatory support and pulmonary pressure monitoring are of uncertain value.
6. Patients with suspected amyloid should undergo screening for monoclonal light chains, and if negative, bone scintigraphy should be performed to confirm the presence of transthyretin amyloid. Genetic testing is recommended in patients with transthyretin amyloid to differentiate hereditary variant from wild type. Tafamadis is recommended in select patients with wild-type or variant transthyretin amyloid to reduce cardiovascular morbidity and mortality (Class of Recommendation 1a). Anticoagulation is reasonable in patients with cardiac amyloid and atrial fibrillation to reduce the risk of stroke (Class of Recommendation 2a).
7. Signs and symptoms of HF can be nonspecific. Therefore, supporting evidence of increased filling pressures, either invasive (hemodynamics) or noninvasive (diastolic function on imaging, natriuretic peptide) are required for confirmation of diagnosis when the EF is >40%.
8. Timely referral for HF specialty care is recommended for advanced HF patients (if in accordance with goals of care) to review HF management and to assess suitability for advanced HF therapies.

9. HF is a progressive disease, as highlighted by the ACC/AHA Stages of HF A-D. New terminology incorporates the designations “at-risk” and “pre-HF”. Primary prevention of HF, through lifestyle modification, screening, and management of risk factors and comorbid conditions, is recommended for those at risk (Stage A) or pre-HF (Stage B).
10. Management of comorbid conditions in patients with HF may be beneficial. The new guideline provides recommendations for select patients with HF and anemia, iron deficiency, hypertension, sleep disorders, type 2 diabetes, atrial fibrillation, coronary artery disease, and malignancy.

Take Home Messages from the Guidelines

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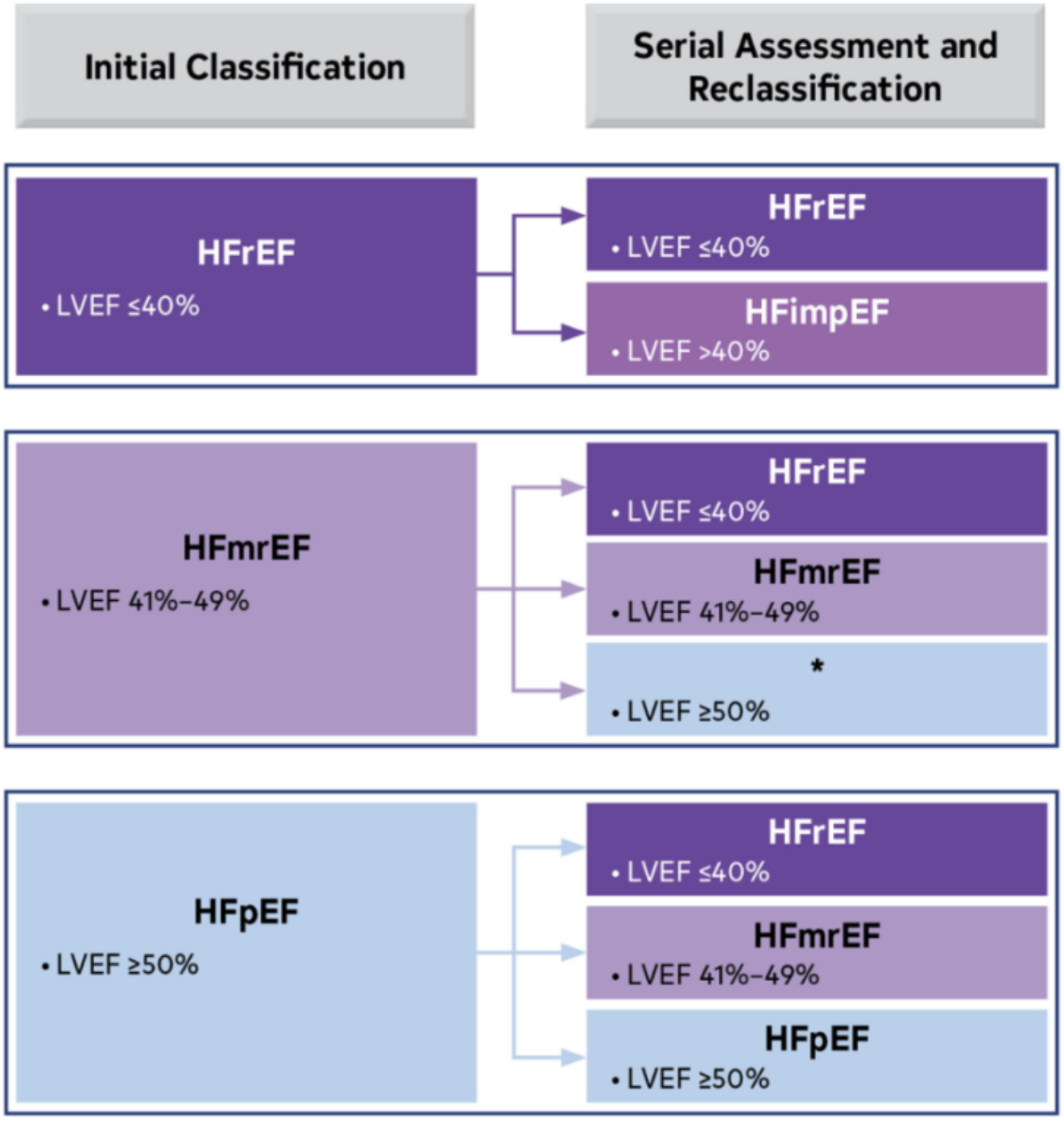


Figure 4. Classification and Trajectories of HF Based on LVEF. See Appendix 1 for suggested thresholds for laboratory findings. The classification for baseline and subsequent LVEF is shown. Patients with HFrEF who improve their LVEF to >40% are considered to have HFimpEF and should continue HFrEF treatment. HF indicates heart failure; HFimpEF, heart failure with improved ejection fraction; HFmrEF, heart failure with mildly reduced ejection fraction; HFpEF, heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction; and LVEF, left ventricular ejection fraction. It is unclear whether to treat these patients as HFpEF or HFmrEF. *There is limited evidence to guide therapy for patients who improve their LVEF from mildly reduced (41%–49%) to ≥50%.

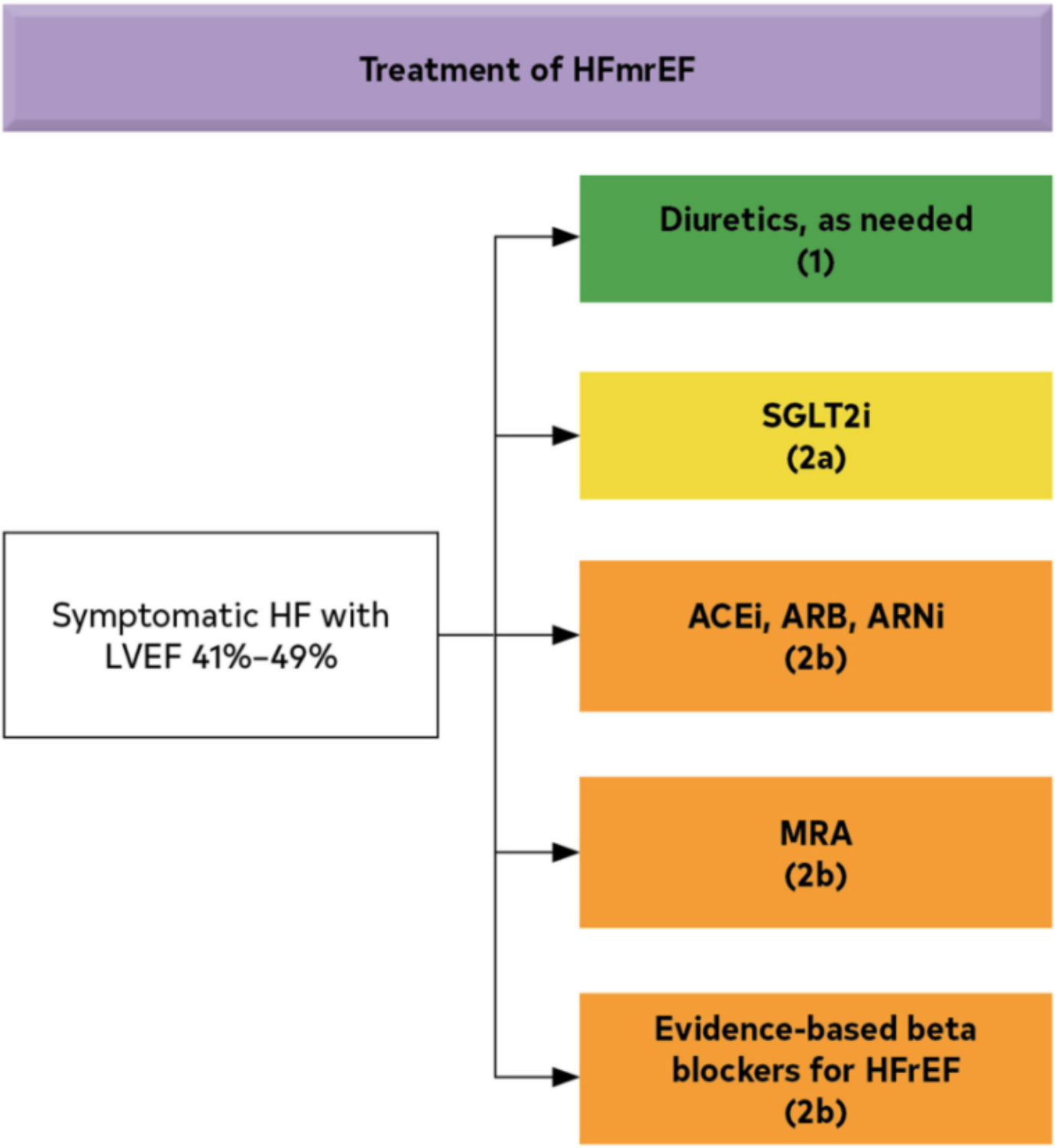


Figure 2. Recommendations for Patients with Mildly Reduced LVEF (41%–49%). Colors correspond to COR in **Table 1**. Medication recommendations for HFmrEF are displayed. ACEi indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; HRmrEF, heart failure with mildly reduced ejection fraction; HFrEF, heart failure with reduced ejection fraction; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; and SGLT2i, sodium- glucose cotransporter 2 inhibitor.

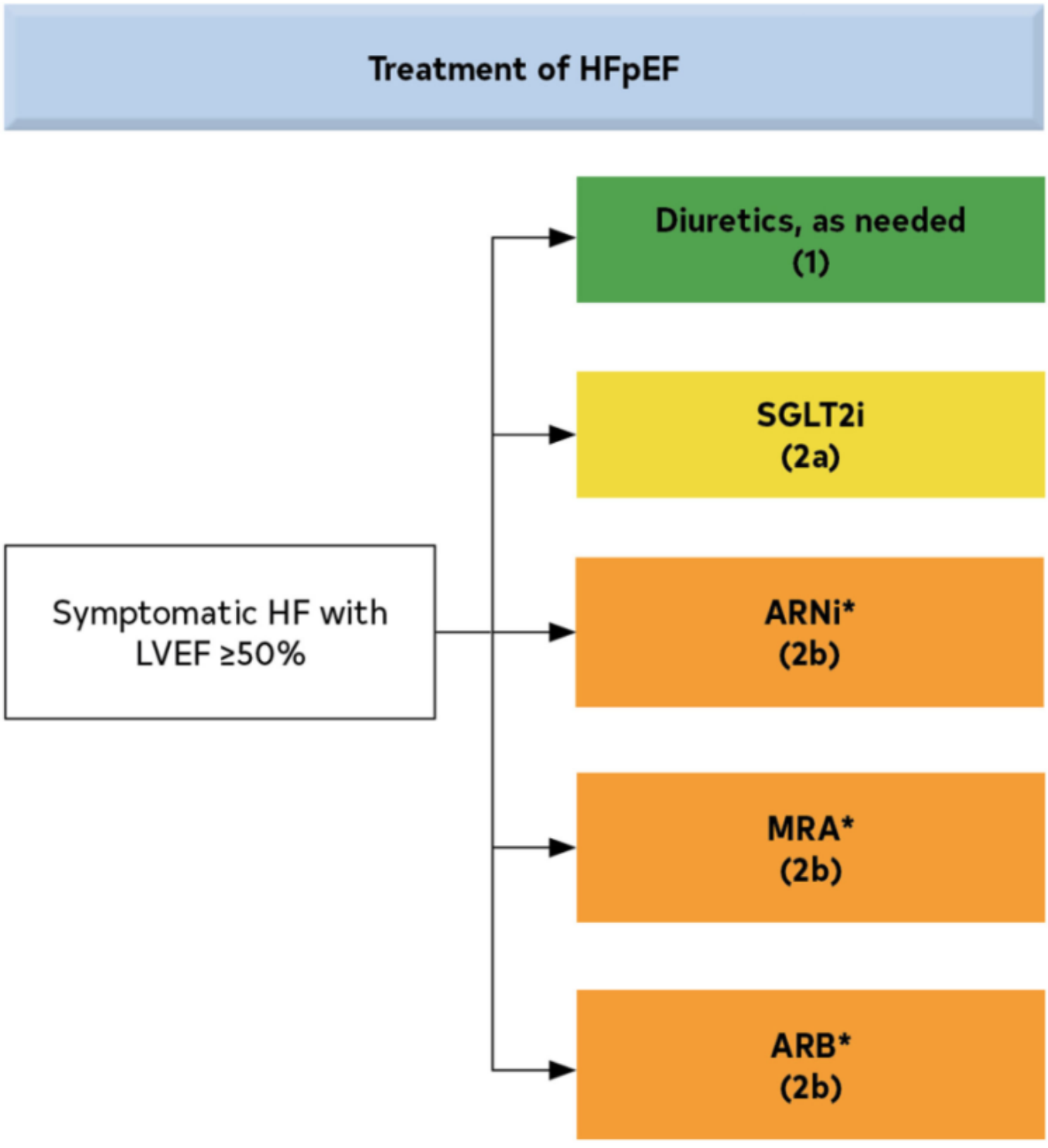


Figure 3. Recommendations for Patients with Preserved LVEF (≥50%). Colors correspond to COR in Table 1. Medication recommendations for HFpEF are displayed. ARB indicates angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; HF, heart failure; HFpEF, heart failure with preserved ejection fraction; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; and SGLT2i, sodium-glucose cotransporter-2 inhibitor. *Greater benefit in patients with LVEF closer to 50%.

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