Akut Kalp Yetmezliği ve Yaklaşım

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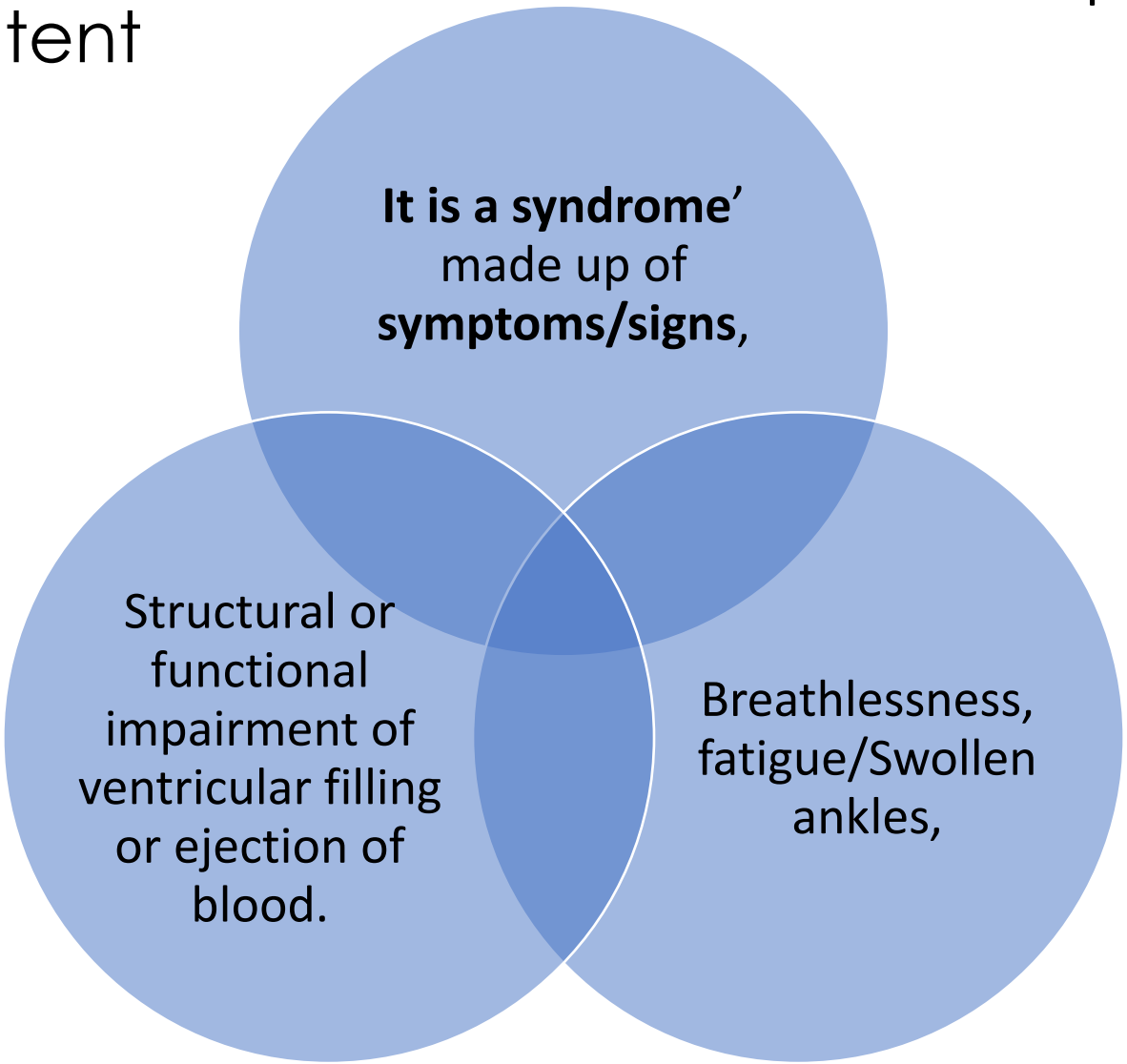
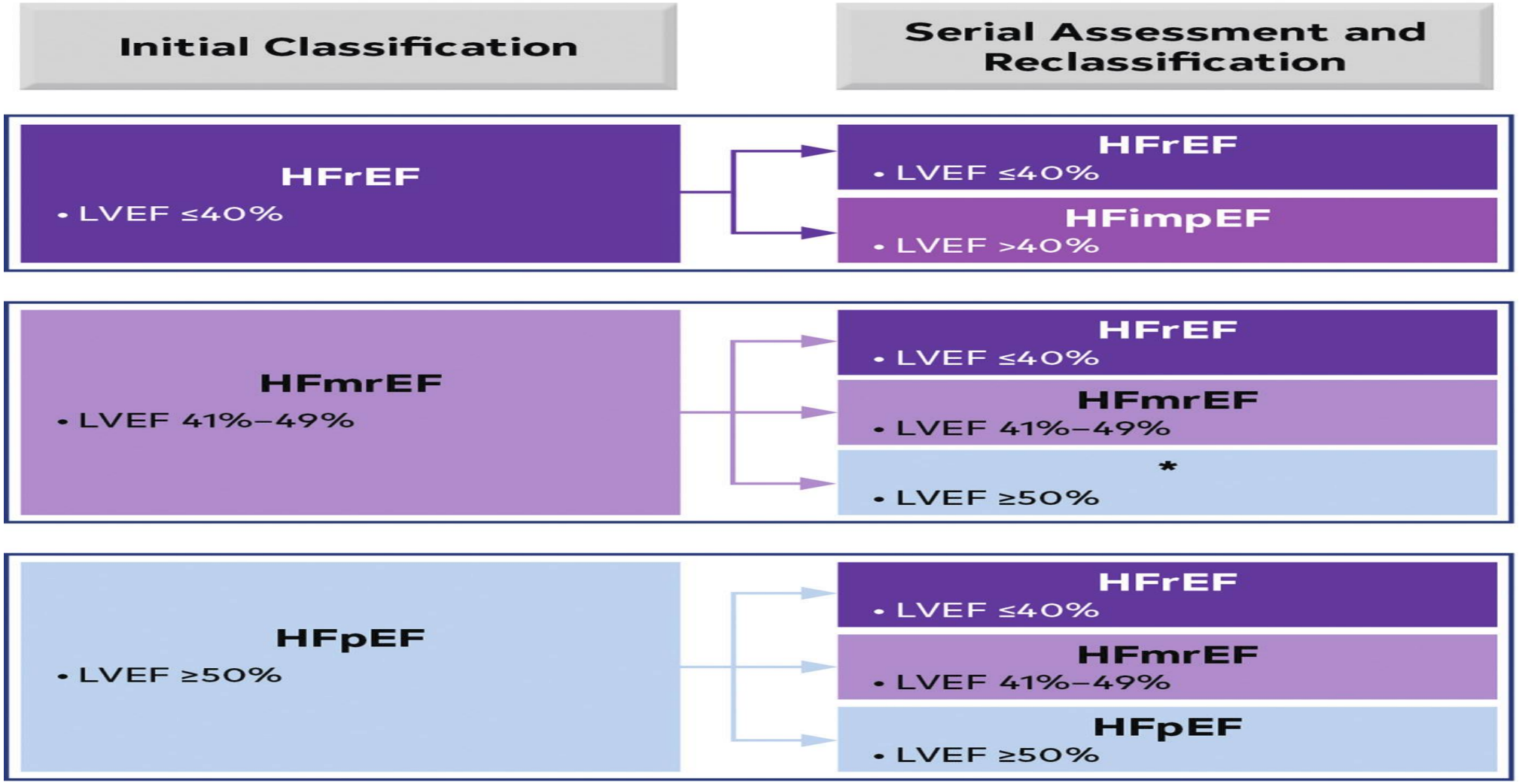
Definition

- Content

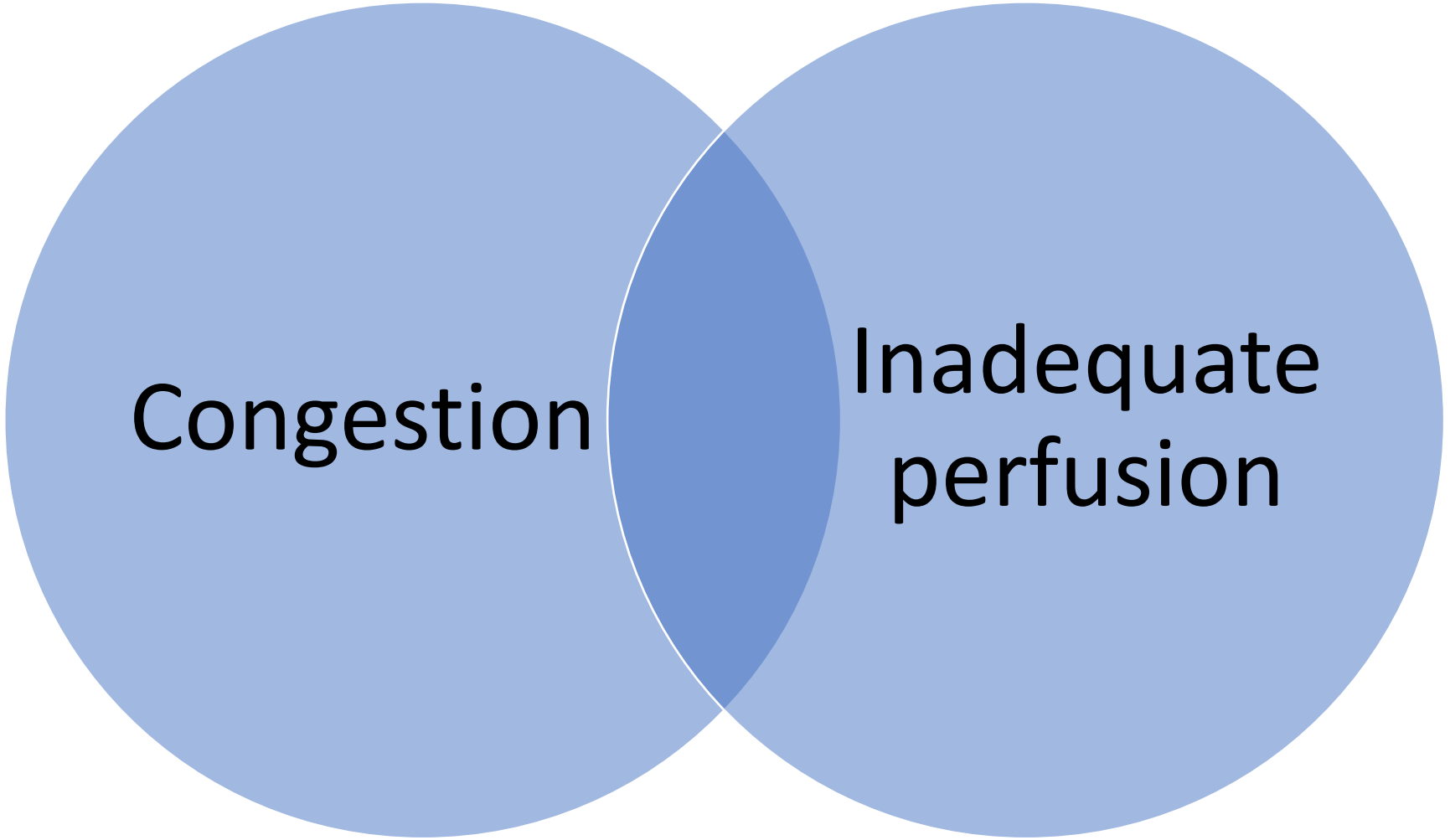
- Rate and hospitalisatin is inreasing



Classification and Trajectories of HF Based on LVEF



Clinical assessment of the hemodynamic profile for severity



Khera R et al. *JAMA Netw Open.* 2020;3:e2022190.

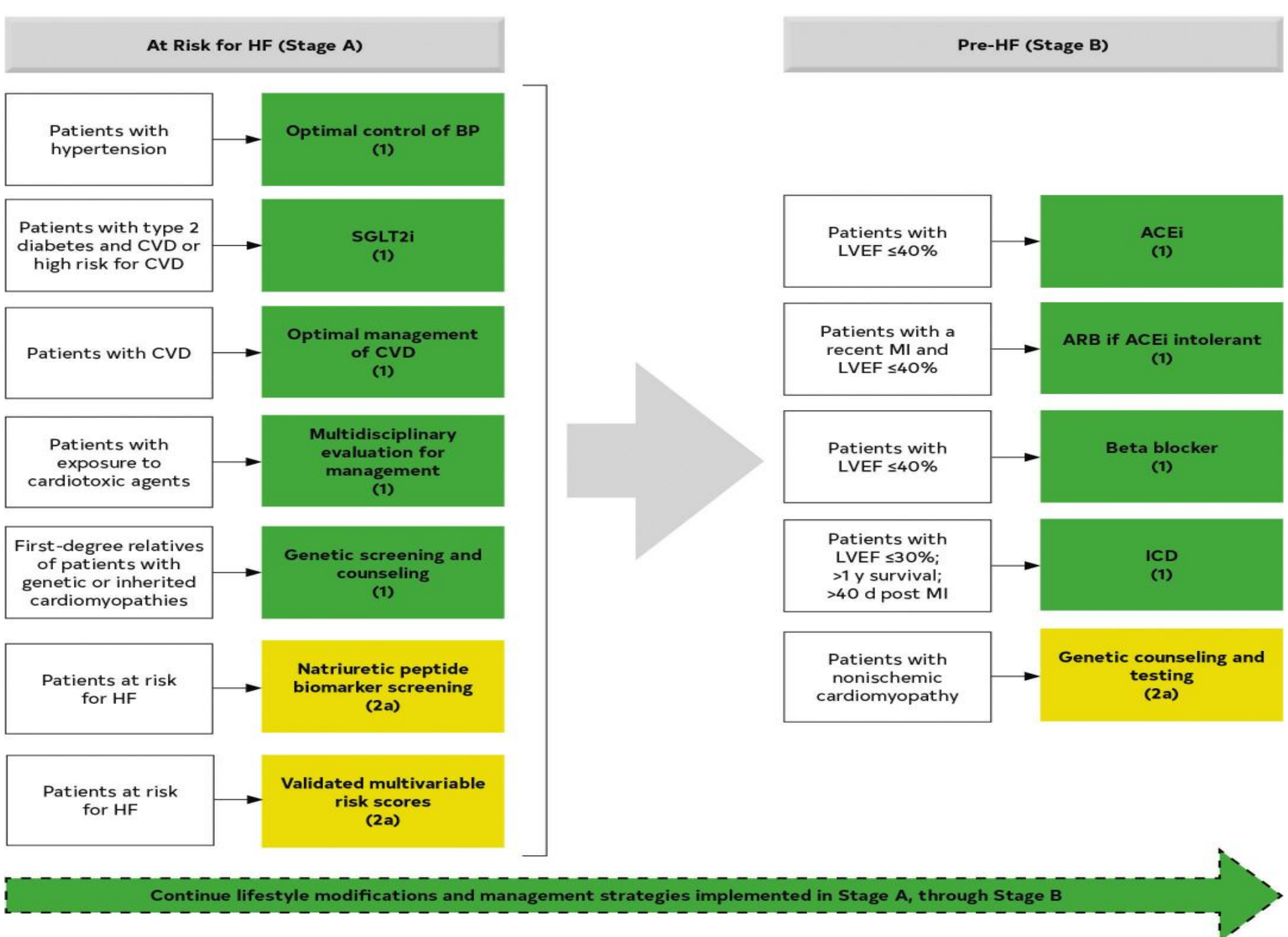
Goal of Treatment

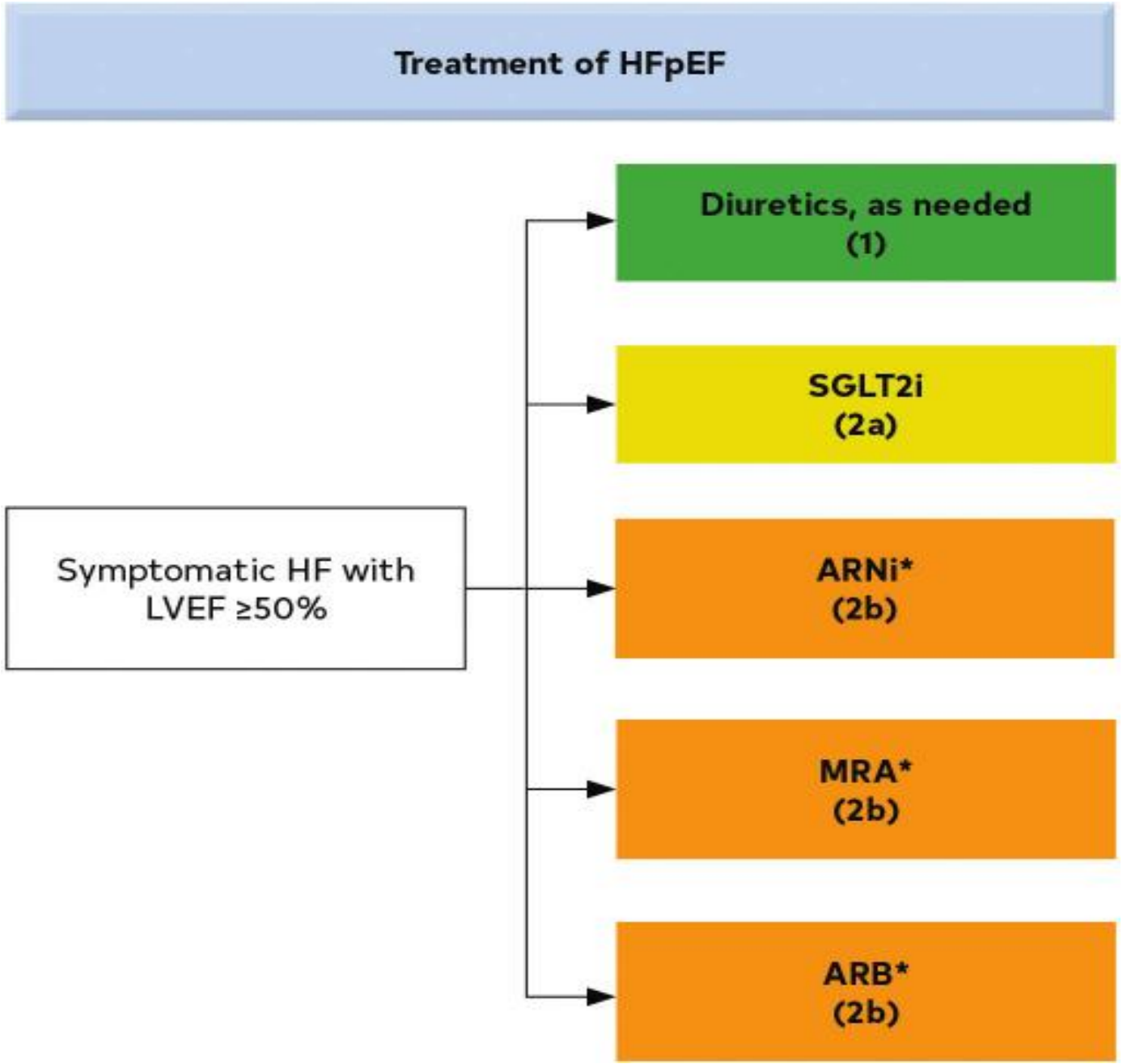
<u>Increase</u>:

Quality of life

<u>Decrease:</u>

Symptoms,
readmission, death,
hospital stay


At Risk for HF (Stage A)
Patients with hypertension
Optimal control of BP (1)
Patients with type 2 diabetes and CVD or high risk for CVD
SGLT2i (1)
Patients with CVD
Optimal management of CVD (1)
Patients with exposure to cardiotoxic agents
Multidisciplinary evaluation for management (1)
First-degree relatives of patients with genetic or inherited cardiomyopathies
Genetic screening and counseling (1)
Patients at risk for HF
Natriuretic peptide biomarker screening (2a)
Patients at risk for HF
Validated multivariable risk scores (2a)
Pre-HF (Stage B)
Patients with LVEF ≤40%
ACEi (1)
Patients with a recent MI and LVEF ≤40%
ARB if ACEi intolerant (1)
Patients with LVEF ≤40%
Beta blocker (1)
Patients with LVEF ≤30%; >1 y survival; >40 d post MI
ICD (1)
Patients with nonischemic cardiomyopathy
Genetic counseling and testing (2a)
Continue lifestyle modifications and management strategies implemented in Stage A, through Stage B

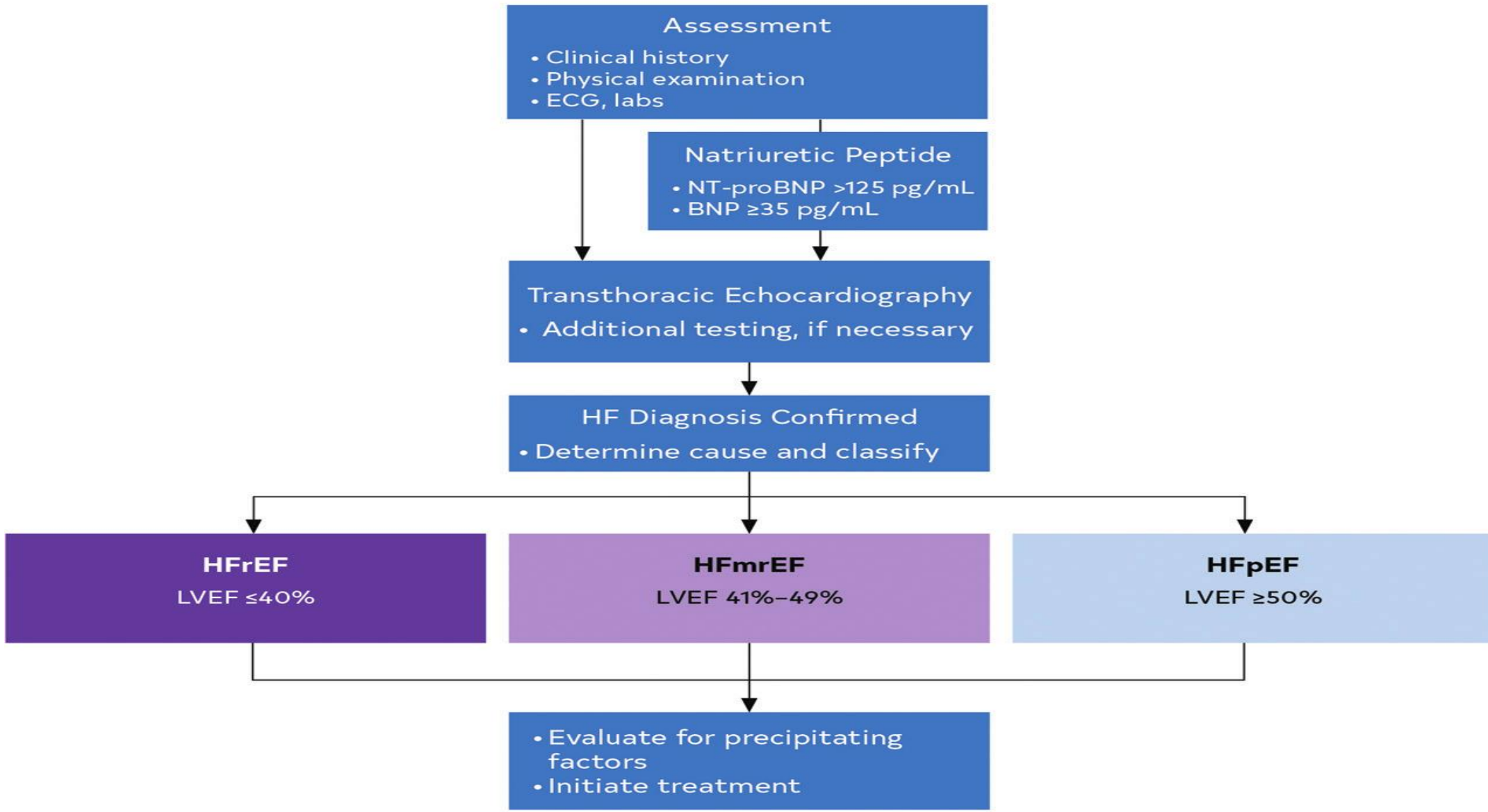


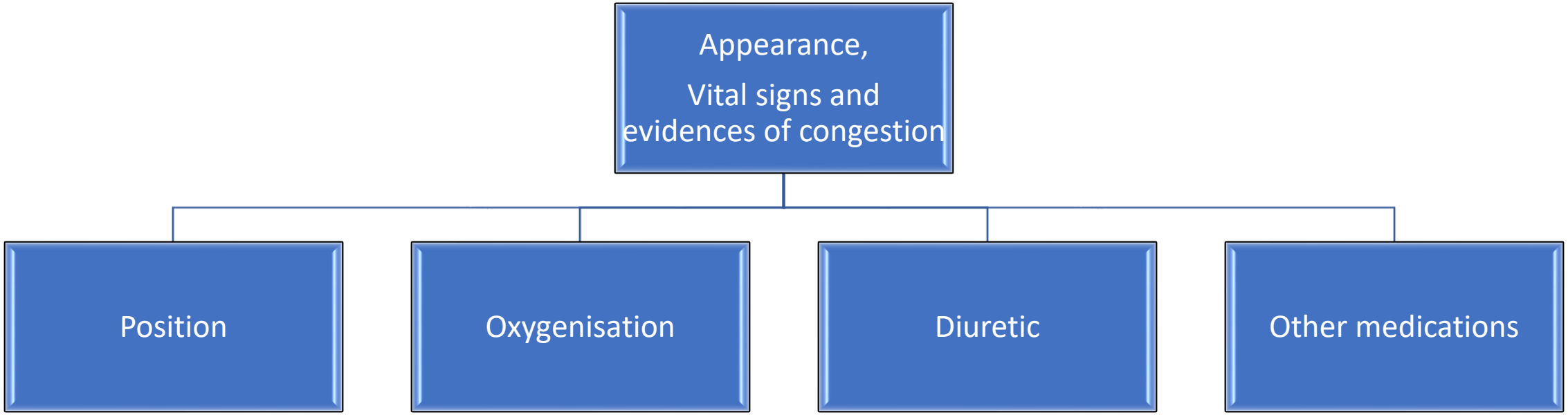
RB indicates angiotensin receptor 29 blocker; ARNi, angiotensin receptor-neprilysin inhibitor; HF, heart failure; HFpEF, heart failure with preserved ejection fraction; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; and SGLT2i, sodium-glucose cotransporter-2 inhibitor. *Greater benefit in patients with LVEF closer to 50%.

INITIAL TRIAGE

- The cornerstone is still the history and PE
- Recognition the requirement of revascularization

Diagnostic Algorithm for Patients With Suspected HF

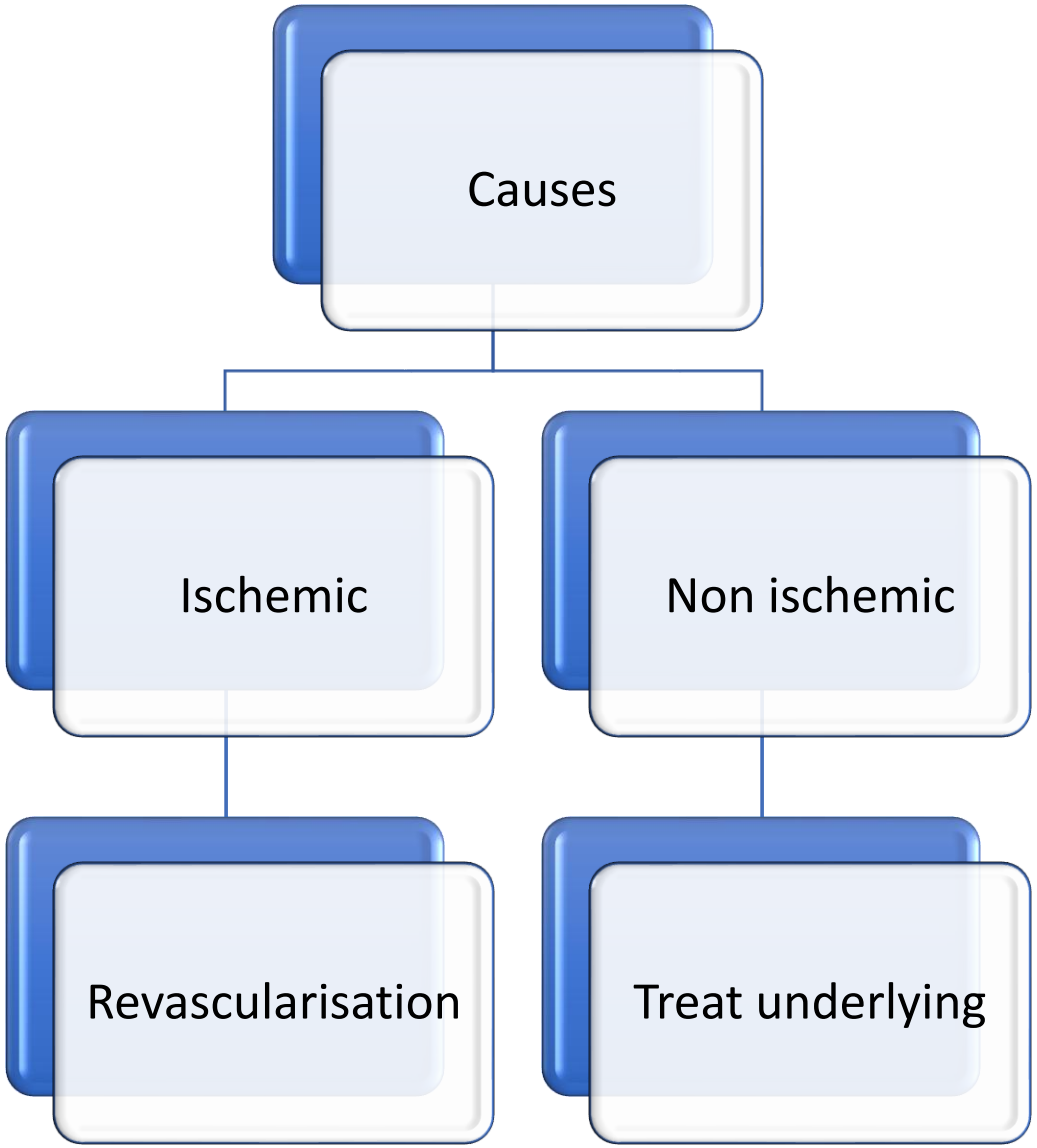




- Adress reversible factors, establish volume status and advanced medical aprroach

No improvement

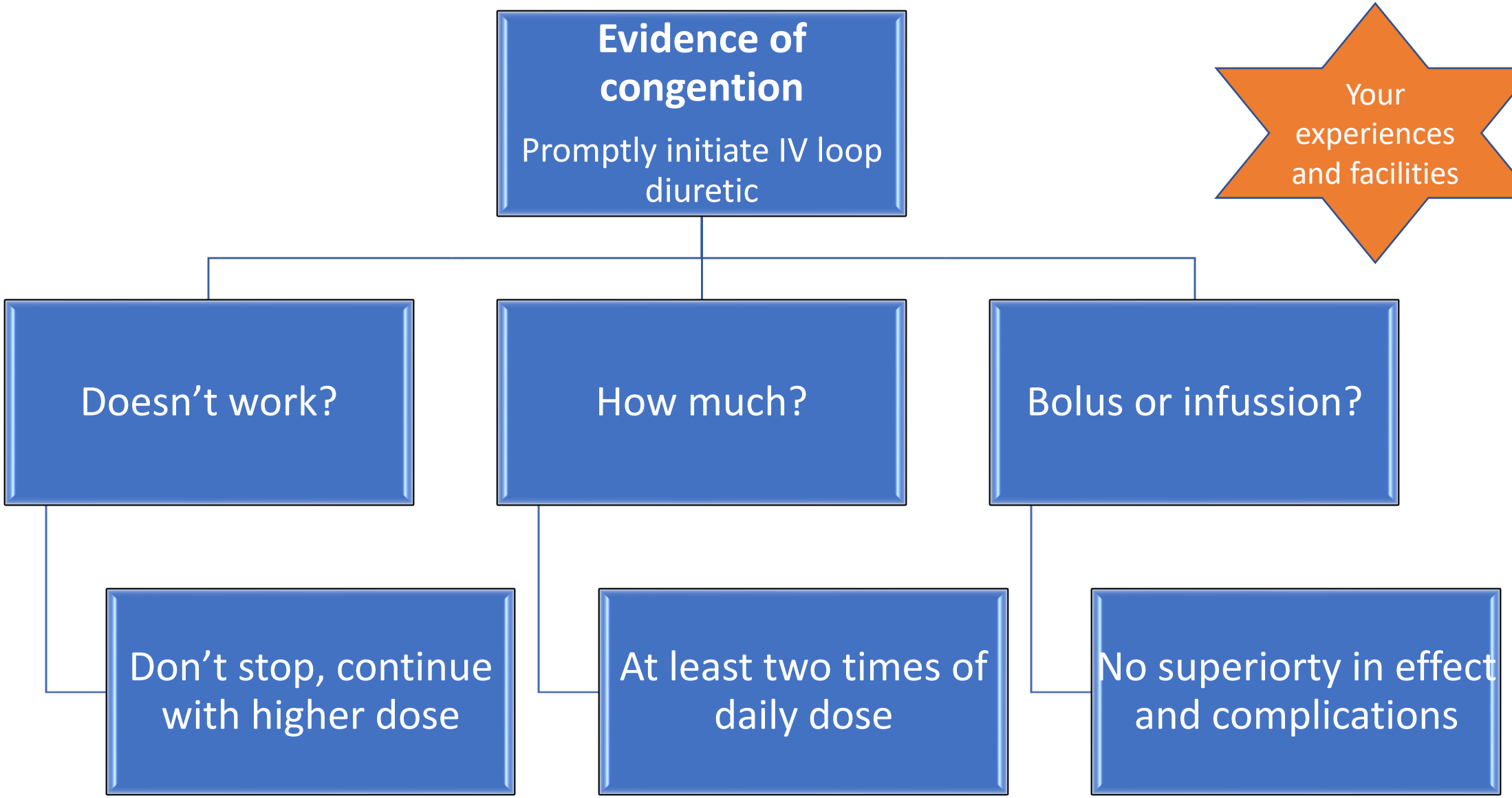
- Try NIMV if vailable (expert and experiences)



Common Factors Precipitating HF Hospitalization With Acute Decompensated HF

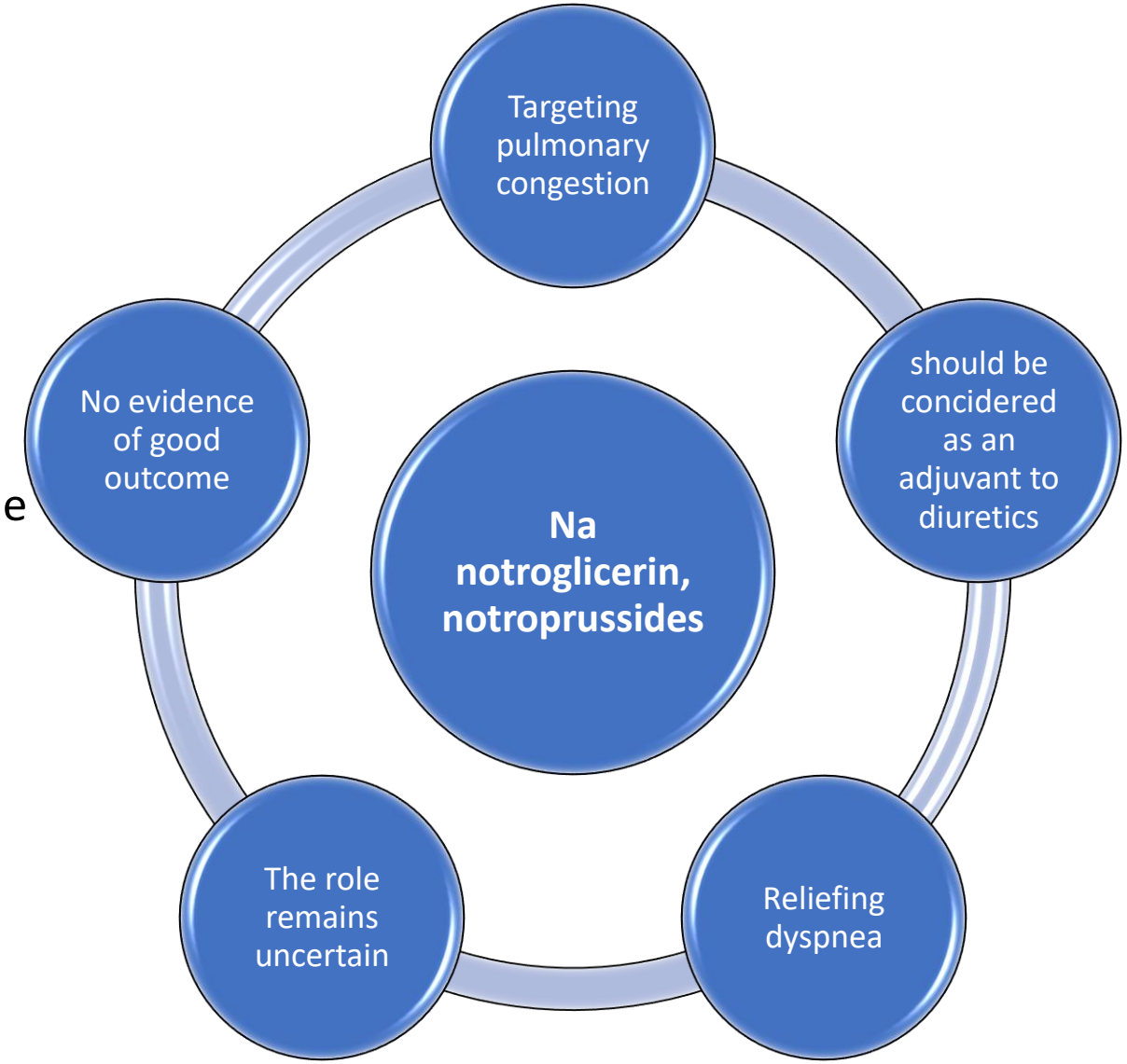
ACS
Uncontrolled hypertension
AF and other arrhythmias
Additional cardiac disease (eg, endocarditis)
Acute infections (eg, pneumonia, urinary tract)
Nonadherence with medication regimen or dietary intake
Anemia
Hyper- or hypothyroidism
Medications that increase sodium retention (eg, NSAID)
Medications with negative inotropic effect (eg, verapamil)

Patients hospitalized with acute DHF



Arteriovasodilatator (Na notroglicerin, notroprussides)

- Tachyphylaxis,
- Headache,
- 20% resistence (even high dose)
- Sudden hypotension
- Thiocyanate and cyanide toxicity,



Tests

- CBC,
- LFT
- KFT
- Eelectrolytes
- Troid FT
- Glukoz
- Lipid profile
- NT-pBNP (supportive)
- ABG
- ECG
- Bedside ECO
- Bedisde PA X-Ray

Cardiogenic shock ?

Suggested Shock Clinical Criteria

SBP <90 mm Hg for >30 min:
a. Or mean BP <60 mm Hg for >30 min
b. Or requirement of vasopressors to maintain systolic BP ≥90 mm Hg or mean BP ≥60 mm Hg
Hypoperfusion defined by:
c. Decreased mentation
d. Cold extremities, livedo reticularis
e. Urine output <30 mL/h
f. Lactate >2 mmol/L

Suggested Shock Hemodynamic Criteria

1. SBP <90 mm Hg or mean BP <60 mm Hg
2. Cardiac index <2.2 L/min/m^2
3. Pulmonary capillary wedge pressure >15 mm Hg
4. Other hemodynamic considerations a. Cardiac power output ([CO x MAP]/451) <0.6 W b. Shock index (HR/systolic BP) >1.0 c. RV shock i. Pulmonary artery pulse index [(PASP-PADP)/CVP] <1.0 ii. CVP >15 mm Hg iii. CVP-PCW >0.6

IV inotrops

Increased cardiac output and improved hemodynamics situatiin as needed

No measurements not improvements

- Fluid intake and output,
- Vital signs,
- Daily body weight
- Clinical signs and symptoms of congestion and
- Hypoperfusion.
- Daily tests (electrolytes, urea nitrogen, and creatinine).

Good bye?

- 33% of eligible pts with HFrEF are not prescribed ACEi-ARB-ARNi, beta blockers, and MRA therapy,
- Persistent congestion at discharge reported as 25% to 50%.

New recommendations are provided for selected pts

- Iron deficiency,
- Anemia,
- Hypertension,
- Sleep disorders,
- Type 2 diabetes,
- Atrial fibrillation,
- Coronary artery disease,
- Malignancy.

Discontinuation (beta blockers ACEi-ARB)

A higher risk for sypmtoms, readmission, rehospitalization mortality,

HOME MESSAGES

- Prevention is the shortest way
- History end PE crucial
- SGLT2i (class 2a) for HFrEF
- ARNi, ACEi, ARB, MRA, beta blockers are class 2b in this population.
- Amyloid heart disease has new recommendations for treatment
- Increased filling pressures is important for the diagnosis of HF (LVEF >40%)
- Refere patients with advanced HF to a specialized team.
- Stage A and Stage B are both **at risk**
- Figure out and treat precipitating factors
- Life style should support quality
- Don’t forget to write appropriate prescribtion