THE EVOLVING LANDSCAPE OF HFrEF TREATMENT

Key AHA/ACC/HFSA 2022 HFrEF Guideline Recommendations

1. "In patients with HFrEF, titration of guideline-directed medication dosing to achieve target doses showed to be efficacious in RCTs is recommended, to reduce cardiovascular mortality and HF hospitalization, unless not well tolerated." (Class 1 Recommendation)

In spite of clear guideline recommendations for the use of GDMT in patients with HFrEF, gaps in treatment implementation have persisted. The risks of death, hospitalization, and progression of disease are frequently underestimated in patients with HFrEF, and in practice, GDMT is often not titrated to the target doses achieved in RCTs.

2. "In ambulatory or hospitalized patients with HF, validated multivariable risk scores can be useful to estimate subsequent risk of mortality." (Class 2a)

National guidelines recommend routine assessment of a patient's risk for an adverse outcome. A number of predictive outcomes models for HF are available, such as the Seattle Heart Failure Model, the Heart Failure Survival score, and the MAGGIC score. Despite this, risk is often not assessed in patients with chronic HFrEF, and is therefore underappreciated and underestimated, leading to delays in optimal GDMT and a lack of evaluation for initiation of novel therapies.

3. "In selected high-risk patients with HFrEF and recent worsening of HF already on GDMT, an oral soluble guanylate cyclase stimulator (vericiguat) may be considered to reduce HF hospitalization and cardiovascular death." (Class 2b)

Once GDMT is optimized, national guidelines recommend considering the adoption of additional therapies. Oral soluble guanylate cyclase (sGC) stimulator vericiguat binds directly and stimulates sGC to increase cGMP production. This has several potentially beneficial effects in patients with HF. Treatment with vericiguat has been found to improve outcomes in recently hospitalized patients with HFrEF, but it remains underutilized.

References

- Heidenreich PA, Bozkurt B, Aguilar D, et al. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure. *J Am Coll Cardiol*. 2022;9(17):e263-e421. doi:10.1016/j.jacc.2021.12.012
- 2. Greene SJ, Butler J, Fonarow GC. Contextualizing risk among patients with heart failure. *JAMA*. 2021;326(22):2261. doi:10.1001/jama.2021.20739