

Patient Case

HPI

- 65-year-old woman with HFrEF
- Med: sacubitril/valsartan, dapagliflozin, furosemide, spironolactone, and bisoprolol
- NYHA Class III, euvolemic
- Complains of breathlessness impacting activities of daily life

Labs

- Hb 13.4 g/dL, ferritin 65 ng/mL, TSAT 18%
- Non-anemic iron deficiency

Diagnosis of Iron Deficiency

- In patients with HF, iron deficiency is defined as either a serum ferritin concentration **<100 ng/mL or 100-299 ng/mL with transferrin saturation (TSAT) <20%**

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2021 ESC/HFA

Recommendations	Class	Level
It is recommended that all patients with HF be periodically screened for anemia and iron deficiency with a full blood count, serum ferritin concentration, and TSAT.	I	C

2022 AHA/ACC/HFSA

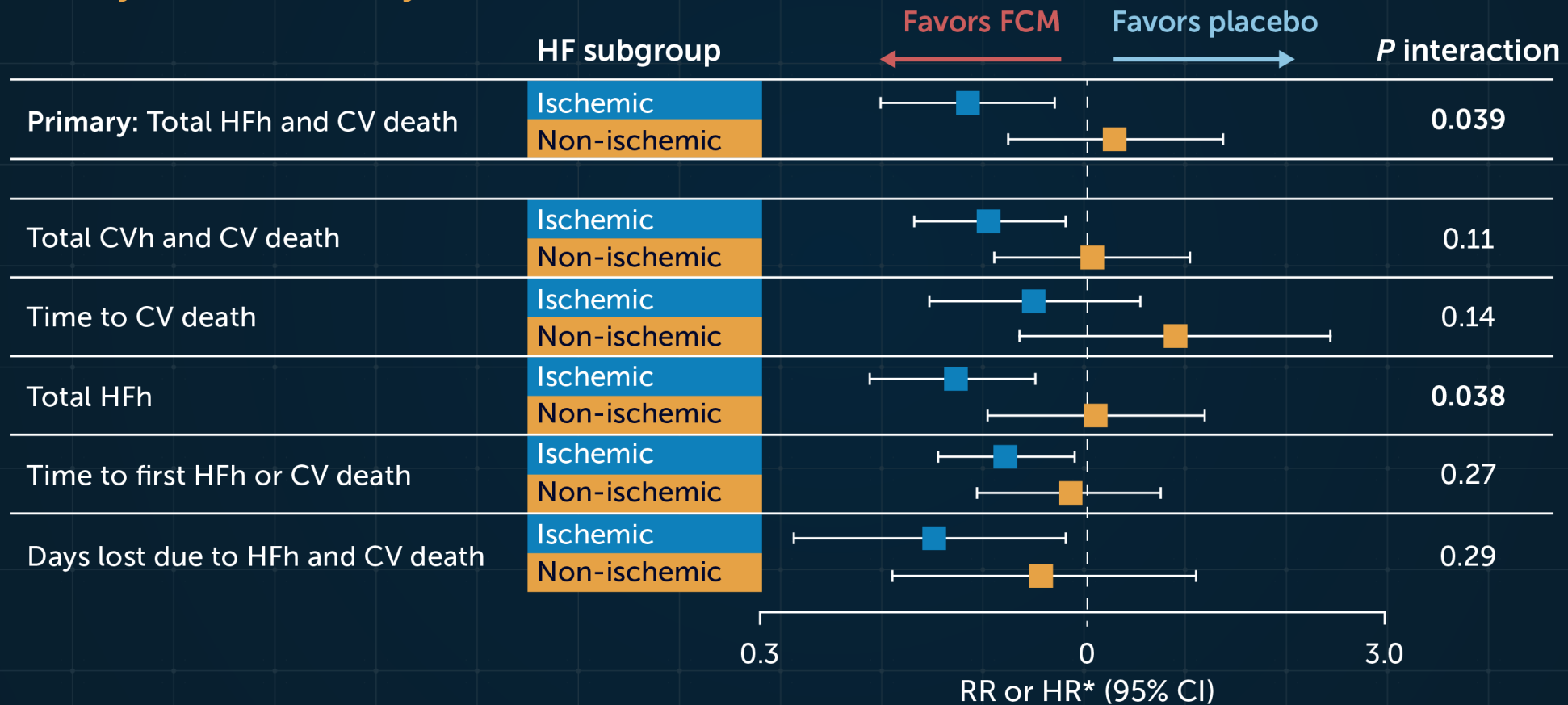
Recommendations	COR	LOE
For patients who are diagnosed with HF, laboratory evaluation should include complete blood count, urinalysis, serum electrolytes, blood urea nitrogen, serum creatinine, glucose, lipid profile, liver function tests, iron studies, and thyroid-stimulating hormone to optimize management.	1	C-E0

HF, heart failure; TSAT, transferrin saturation.

Heidenreich PA, et al. 2022 AHA/ACC/HFSA guideline for the management of heart failure: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation*. 2022;145(18):e876-e894.

AFFIRM-AHF Subgroup Analysis of Patients with Ischemic vs Non-Ischemic HF Etiology

Primary and secondary outcomes at week 52



CV, cardiovascular; CVh, cardiovascular hospitalization; FCM, ferric carboxymaltose; HF, heart failure; HFh, heart failure hospitalization; HR, hazard ratio; RR, relative risk.

Patient Case (cont'd)

Treatment Plan

- IV iron supplementation with ferric carboxymaltose should be considered in symptomatic patients with HFrEF to improve functional status and QoL
- Class 2 recommendation in both 2021 ESC/HFA and 2022 AHA/ACC/HFSA guidelines

Primary Endpoints in Clinical Trials of Iron Deficiency in Heart Failure

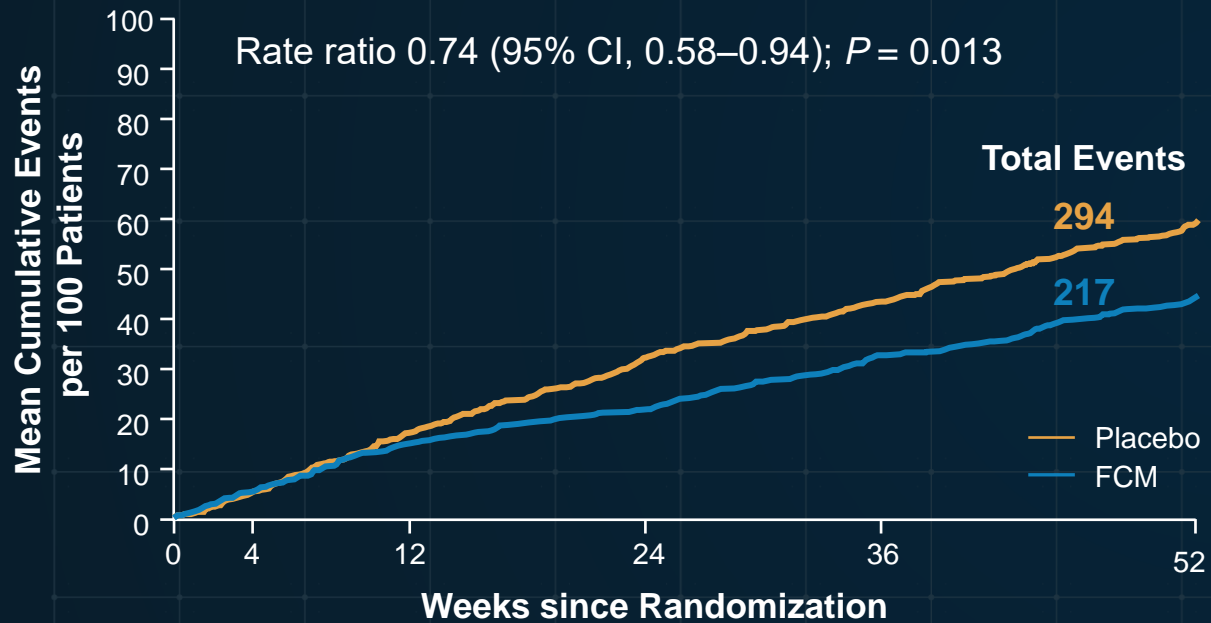
FER-CARS-01	FAIR-HF	EFFICACY-HF	CONFIRM-HF	AFFIRM-HF
PGA at Week 12 and NYHA Class from baseline to Week 12	PGA at Week 24 and NYHA Class from baseline to Week 24	Change in 6MWT and NYHA class	Change in 6MWT from baseline to Week 24	Composite of recurrent events of HF hospitalization and cardiovascular death

6MWT, 6-minute walk test; HF, heart failure; NYHA, New York Heart Association; PGA, physician global assessment.

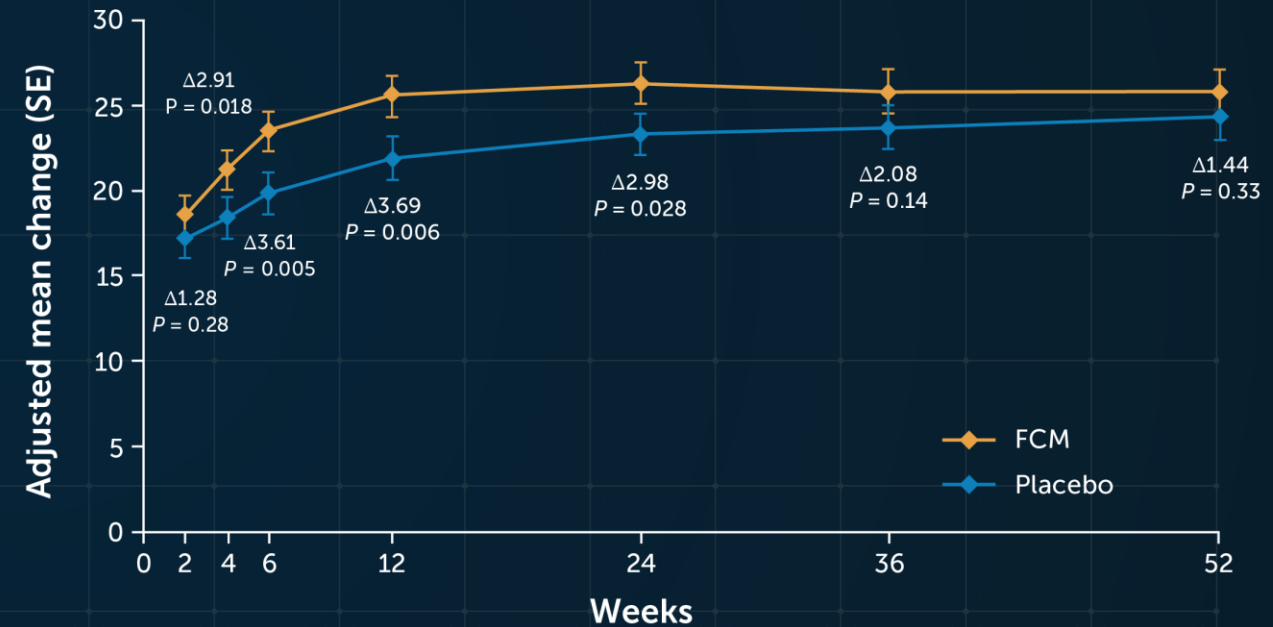
Khan MS, et al. *ESC Heart Fail.* 2020;7(6):3392-3400.

AFFIRM-AHF: Total Hospitalizations and QoL

Total HF Hospitalizations



KCCQ-12 overall summary score (OSS)



mITT population. FCM, ferric carboxymaltose; HF, heart failure, mITT, modified intention to treat; QoL, quality of life.

Ponikowski P, et al. *Lancet*. 2020;396(10266):1895-1904; Jankowska EA, et al. *Eur Heart J*. 2021;42(31):3011-3020; Vaduganathan M, et al. *JAMA Cardiol*. 2020;6(3):1-10.