

Outline of Ongoing Clinical Trials of Iron Repletion in Patients with Heart Failure

STUDY	INCLUSION CRITERIA	IRON INTERVENTION	PRIMARY OUTCOME
Intravenous Iron in Patients With Systolic Heart Failure and Iron Deficiency to Improve Morbidity & Mortality. FAIR-HF2 , (n=1200) (NCT03036462)	HF, confirmed iron deficiency, Hb 9.5-14.0 g/dL	FCM (1,000 mg, then 500- 1,000 mg within 4 weeks [max 2,000 mg total], then 500 mg every 4 months	HF hospitalizations and CV death (composite endpoint)
Effect of IV Iron (Ferric Carboxymaltose) on Exercise Tolerance, Symptoms and Quality of Life in Patients With HFpEF and Iron Deficiency With and Without Anemia. FAIR-HFpEF, NCT03074591 (n=200)	HF with preserved LVEF (HFpEF) and diastolic dysfunction, LVEF ≥45%, NYHA II-III, either HFH within 1 year or elevated NP, Hb >9.0 g/dL and ≤14.0 g/dL, ferritin <100 µg/L or ferritin 100-299 with TSAT <20%, 6MWD <450 m	FCM vs placebo	Exercise capacity: change i 6MWD from baseline to 12 months
Impact of Intravenous Iron Repletion on Mechanisms of Exercise InTolerance in HFpEF. IRONMET-HFpEF (NCT04945707), n = 66	NYHAII-IV; EF ≥ 50%; NT-proBNP >125ng/L or PCWP>15 mmHg(rest) or PCWP/CO2 (exercise) or HF hospitalization within 12 months; Hgb 9-15g/dL (males); Hgb 9.0 - 13.5g/dL (females); pVO2 ≤75% predicted	Ferric Derisomaltose 1000mg vs. placebo	Change in peak oxygen uptake (peak VO2) from baseline to week 12 in HFpEF subjects with functional iron deficiency
The Prevalence of Iron Deficiency and the Effective- ness of Ferinject® in Patients With HFpEF. ID-HFpEF (NCT05793996), n = 100	NYHAII-IV; EF ≥ 50%; ID (ferritin below 100 µg/L, or below 300 µg/L when transferrin saturation (TSAT) is below 20%; hemoglobin (Hb) at the time of switching on (90-150 g/I)	Ferric carboxymaltose vs. diet therapy without drug therapy vs. no intervention	Change of 5 or more point on the Kansas City Cardiomyopathy Questionnaire (KCCQ) (0-100 points) + change in test distance wit a 6-minute walk (6MWD - 150 meters or more) by 35 meters or more.
The Effects of Ferric Derisomaltose in Patients With Acute Heart Failure and Iron Deficiency on Exercise Capacity and Quality of Life. COREVIVE-HFREF (NCT05971732), n = 146	Patients with HFrEF (EF ≤ 50%); currently hospitalized for an episode of acute HF, NYHA II-IV; with ID (ferritin <100 ng/mL or ferritin 100-299 ng/mL and TSAT <20%)	Ferric derisomaltose vs. placebo	Difference of 6-minute walking distance in meters from baseline to day3 after IV iron injection.
Effect of INtravenous FERRic Carboxymaltose Onmortali- ty and Cardiovascular Morbidity, and Quality of Life in Iron Deficient Patients With Recent Myocardial infarction. INFERRCT (NCT05759078), n = 2000	Patients with HFrEF (EF ≤ 50%); diagnosis of acute myocardial infarction (STEMI or NSTEMI) up to 4 weeks before randomization; and with iron deficiency (TSAT<20% and/or serum ferritin <100 ng/mL)	Ferric carboxymaltose vs. placebo	 Time to CV death Number of HF events Time to first HF event Change in quality of life

ADAPTED FROM

- Beavers CJ et al. "Iron deficiency in heart failure: a scientific statement from the Heart Failure Society of America." Journal of Cardiac Failure 29.7 (2023): 1059-1077.
- ClinicalTrials.gov

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