

Title: HEART-FID: Ferric Carboxymaltose in HF With Iron Deficiency Participants: Dr Robert Mentz
Date: 28th August 2023

Dr Robert Mentz

" Hi. I'm Dr. Robert Mentz, a heart failure cardiologist at Duke University, and I'll be speaking about the HEARTFID trial just presented here at ESC Congress.

The Current Landscape of FCM in HF Treatment

As we talk about the current landscape of IV-FCM or ferric carboxymaltose in heart failure. what we know is there are class one recommendations to check for iron deficiency in heart failure, and then there's a class one recommendation for FCM or IV iron to improve quality of life and exercise capacity in heart failure. Then the most recent guideline update gives a class two recommendation to potentially improve heart failure hospitalizations in patients. So increasingly there is a recognition of that this medication helps people feel and function better when they have heart failure with iron deficiency, with some potential benefits on clinical outcomes.

Patient Population and Study Design

So the HEARTFID trial was a trial, long outcome trial to look at heart failure events in all-cause mortality in patients with heart failure with reduced ejection fraction and iron deficiency. It was designed in over 3000 patients with heart failure, a double-blind, placebo-controlled, event-driven trial of ferric carboxymaltose versus placebo, looking at a primary endpoint of twelve months all-cause mortality, followed by a heart failure hospitalization in a hierarchy, and then six months six-minute walk distance.

Key Findings

So in HEARTFID, we had a population of 3065 patients. It was approximately a third women, an average age around 69, and 11% self-identified black individuals. In the US, that was 26%. Ultimately, what we found for our primary endpoint was that there was a

modest benefit across each of the components with ferric carboxymaltose, a numerical reduction in mortality, reduction in heart failure hospitalizations, and a modest improvement in terms of six-minute walk distance from baseline to six months.

Given that this was designed in discussions with the FDA to be one pivotal trial, we had a higher bar for our prespecified P value of 0.1. So ultimately our P value for superiority was 0.19. So it was technically a neutral study in terms of the primary endpoint. However, the totality of evidence really demonstrating the safety of FCM and suggesting benefits on each of these components of the primary endpoint.

What this Study Adds to the Conversation Surrounding FCM in Recent Years

So HEARTFID nicely adds additional data, the largest of any of the IV iron studies. And importantly, at the same time, we also pooled these data with the AFFIRM AHF and confirmed studies and looked at clinical outcomes across multiple trials in over 4500 patients and did find a significant reduction in a composite of cardiovascular death or total cardiovascular hospitalizations. So, I think putting it all together, we now have a large study showing long-term safety, adding on exceptional background therapy. We can have potential clinical outcome benefits by adding on FCM to medications for heart failure.

Take-Home Messages

To me, some of the key take-home messages are ferric carboxymaltose is safe. We were struck by a potential reduction in death events, a modest improvement in terms of heart failure hospitalizations and six-minute walk distance. So I think this adds another tool to our toolkit for helping manage patients with heart failure. And then it's nice because it's not another medication you take every day, but it's being given either in clinic or in the hospital intravenously in a fairly simple way to help our patients improve their clinical course.

Knowledge Gaps

So much will be explored as we take a deeper dive into the data set. I think better understanding those populations that might benefit the greatest from this. There's some early signals that those with lower TSAT may be one such group. In addition, we want to better understand the repletion needs over time. And in fact, may this just be a one and done where getting these doses early, is that sufficient or do they need additional doses over time? So we'll explore those details and certainly I hope future studies will look at the heart failure with preserved ejection fraction group.”