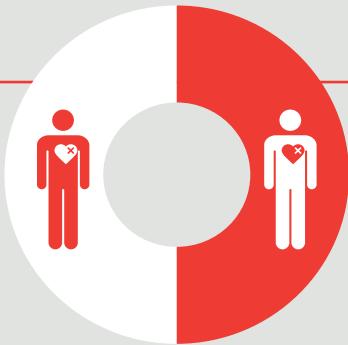


## IRON DEFICIENCY IN CHRONIC HEART FAILURE (CHF)



Up to 1 in 2 patients with CHF have iron deficiency<sup>1</sup>

Iron deficiency in patients with CHF is associated with:

- Increased hospitalisations due to heart failure<sup>1</sup>
- Reduced quality of life<sup>2</sup>
- Fatigue<sup>2</sup>
- Decreased aerobic performance, exercise capacity<sup>3</sup>

Updates on screening for and managing iron deficiency in HF →

Adverse events should be reported. Reporting forms and information can be found at <https://yellowcard.mhra.gov.uk/> or search for MHRA Yellow Card in Google Play or Apple App Store. Adverse events should also be reported to Vifor Pharma UK Limited (Tel: 01276853633). Email: [medicalinfo\\_UK@viforpharma.com](mailto:medicalinfo_UK@viforpharma.com)

[Click here for prescribing information](#)

UK-FCM-2500055. March 2025

**Step 1:  
Screening**



**Periodically check for iron deficiency in all patients with HF<sup>1</sup>**  
(Class I, Level C)

**Ferritin**  
 $<100$  ng/mL

**Or**

**Ferritin**  
 $100-299$  ng/mL  
when TSAT  $<20\%$

**Symptomatic patients with iron deficiency and HF with LVEF  $<50\%$   
(HFrEF and HFmrEF)<sup>4</sup>**

**Step 2:  
Treatment**

**IV iron supplementation is recommended to alleviate HF symptoms and improve quality of life<sup>4</sup>**  
**(ESC HF Guidelines: Class I, Level A)**

**IV iron supplementation with ferric carboxymaltose or ferric derisomaltose should be considered to reduce the risk of HF hospitalisation<sup>4</sup>**  
**(ESC HF Guidelines: Class IIa, Level A)**

Most of the evidence refers to patients with LVEF  $\leq 45\%$ .

## Iron deficiency treatment



### **Ferinject® (ferric carboxymaltose) to correct iron deficiency<sup>1,4</sup>**

Ferinject® is indicated when oral iron preparations are ineffective or cannot be used, or when there is a clinical need to deliver iron rapidly. The diagnosis of iron deficiency must be based on laboratory tests.<sup>5</sup>

**For dosing recommendations in adults and adolescents aged 14 years and above**

**The maximum weekly dose is 1000 mg iron, equivalent to 20 mL Ferinject®**  
For dosing considerations in patients aged 1-13 years please refer to the SmPC. Ferinject® is not recommended for use in children below 1 year of age.



**IV infusion:** a single dose must not exceed 1000 mg iron or 20 mg/kg body weight



**IV injection:** a single dose must not exceed 1000 mg iron or 15 mg/kg body weight

A single maximum daily dose of 200 mg iron should not be exceeded in haemodialysis-dependent chronic kidney disease patients aged 14 years and above.

The individual total iron need for repletion using Ferinject® is determined based on the patient's body weight and haemoglobin (Hb) level. Two doses may be required to replenish the total iron need.

#### **Determination of the total iron need.**

Hb (g/dL) <sup>†</sup>	Patient body weight*	
	35 kg to $<70$ kg	70 kg and above
<10	1,500 mg	2,000 mg
10 to $<14$	1,000 mg	1,500 mg
$\geq 14$	500 mg	500 mg

\*For patients with bodyweight  $<35$  kg refer to the SmPC. **Ferinject® should only be administered when staff trained to evaluate and manage anaphylactic reactions is immediately available, in an environment where full resuscitation facilities can be assured. The patient should be observed for adverse effects for at least 30 minutes following each Ferinject® injection.**

<sup>†</sup>All trials in HF excluded patients with Hb above 15 g/dL.



### **Check ferritin**

no earlier than 4 weeks after replacement therapy.  
Further re-assessment of ferritin should be made by the clinician based on the individual patient's condition<sup>5</sup>

## 2023 Focused Update of the 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure regarding the management of anaemia and iron deficiency<sup>1,4</sup>

- Higher level of recommendation for treatment of iron deficiency with IV iron to alleviate HF symptoms and improve QoL
- Treatment of iron deficiency is recommended in a wider patient population - now including symptomatic patients with LVEF<50% (HFrEF and HFmrEF) regardless of hospitalisation history
  - ~393,000 UK patients could now benefit from IV iron treatment of iron deficiency<sup>6</sup>
- With a wider treatment choice with IV iron

### Iron status should be checked in all patients with HF<sup>1</sup>

Recommendations for diagnostic tests in all patients with HF:<sup>1</sup>



Unchanged

I C

#### Recommendation – Class I; Level of evidence: C<sup>1</sup>

Routine blood tests for comorbidities, including full blood count, urea and electrolytes, thyroid function, fasting glucose and HbA1c, lipids, iron status (TSAT and ferritin).

**ALL PATIENTS** with HF should be **PERIODICALLY** screened for anaemia and iron deficiency<sup>1</sup>



Unchanged

I C

#### Recommendation – Class I; Level of evidence: C<sup>1</sup>

It is recommended that all patients with HF be periodically screened for anaemia and iron deficiency with a full blood count, serum ferritin concentration and TSAT.

The defined cut-off values to diagnose iron deficiency are: Serum ferritin of <100 ng/mL **OR** serum ferritin of 100–299 ng/mL with TSAT <20%.<sup>1</sup>

### Recommendations for the management of iron deficiency in patients with heart failure:<sup>4</sup>



New

I A

#### Recommendation – Class I; Level of evidence: A<sup>4</sup>

Intravenous iron supplementation is recommended in symptomatic patients with HFrEF and HFmrEF, and iron deficiency, to alleviate HF symptoms and improve quality of life.



New

Ia A

#### Recommendation – Class IIa; Level of evidence: A<sup>4</sup>

Intravenous iron supplementation with ferric carboxymaltose or ferric derisomaltose should be considered in symptomatic patients with HFrEF and HFmrEF, and iron deficiency, to reduce the risk of HF hospitalisation.

Ferinject® is indicated for the treatment of iron deficiency when oral iron preparations are ineffective or cannot be used, or there is a clinical need to deliver iron rapidly. The diagnosis of iron deficiency must be based on laboratory tests.<sup>5</sup>

Most of the evidence refers to patients with LVEF ≤45%.

**ALL patients with HF should be periodically screened for anaemia and iron deficiency with a full blood count, serum ferritin concentration, and TSAT<sup>1</sup>**

### **Key changes in the 2023 Focused Update of the 2021 ESC HF Guidelines:<sup>4</sup>**

- Higher level of recommendation for treatment of iron deficiency with IV iron
- In a wider patient population
- With a wider treatment choice

Please always refer to the Summary of Product Characteristics for full details.

#### **Abbreviations:**

**CHF**, Chronic heart failure; **ESC**, European Society of Cardiology; **Hb**, haemoglobin; **HbA1c**, glycated haemoglobin; **HF**, heart failure; **HFmrEF**, heart failure with mildly reduced ejection fraction; **HFrEF**, heart failure with reduced ejection fraction; **LVEF**, left ventricular ejection fraction; **QoL**, quality of life; **SmPC**, Summary of Product Characteristics; **TSAT**, transferrin saturation.

#### **References:**

1. McDonagh TA, et al. Eur J Heart Fail. 2022;24(1):4–131.
2. Comin-Colet J, et al. Eur J Heart Fail. 2013;15(10):1164–1172.
3. Jankowska EA, et al. J Card Fail. 2011;17(11): 899–906.
4. McDonagh TA, et al. Eur Heart J. 2023;44(37):3627–3639.
5. Ferinject Summary of Product Characteristics.
6. Vifor Pharma, Data on File 151.

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## Ferinject UK Prescribing Information

**Ferric Carboxymaltose 50mg iron/mL  
dispersion for injection/infusion**

10mL/5 vials, 20mL/1 vial



Click here or scan the QR code to access  
UK prescribing information for Ferinject® (ferric carboxymaltose)

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