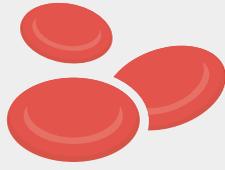


## THE ROLE OF IRON IN THE BODY



Iron is a vital component of red blood cells, which transport **oxygen** around the body<sup>1</sup>



**Increasing** exercise capacity & quality of life<sup>1</sup>



Helping the heart **generate energy**<sup>1</sup>

## IRON DEFICIENCY IS COMMON IN HEART FAILURE

### WHY SHOULD WE CARE ABOUT IRON DEFICIENCY?



Heart failure is a leading cause of **hospitalisations** in people over 65<sup>4</sup>



Up to **50%** of people with heart failure may have iron deficiency<sup>2</sup>



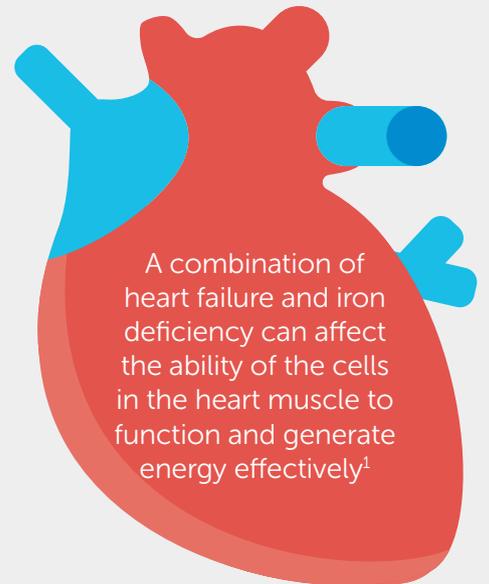
Iron deficiency in heart failure leads to serious health consequences and directly impacts the **quality of life** of people with the condition<sup>1-3</sup>

## THE IMPACT OF LOW IRON ON THE HEART



**Increased inflammation** in the **heart** means that **iron is not well absorbed** by the body<sup>2,5</sup>

Low iron levels may **decrease** the amount of **oxygen** in the **blood** and **limit exercise ability**<sup>1,6</sup>



## MANAGING IRON DEFICIENCY

The European Society of Cardiology now recommends that IV iron treatment should be considered for people with heart failure who show symptoms of iron deficiency<sup>7</sup>

It is easy to determine if someone is iron deficient, a simple blood test can be done to see how much iron is in the body



## TREATING IRON DEFICIENCY IN HEART FAILURE HAS BEEN PROVEN TO

- Improve **quality of life**<sup>8,9</sup>
- Reduce **hospitalisations**<sup>9</sup>
- Increase **exercise capacity**<sup>8,9</sup>
- Improve the **symptoms of heart failure**<sup>8,9</sup>



## REFERENCES

1. Jankowska EA, et al. Iron deficiency and heart failure: diagnostic dilemmas and therapeutic perspectives. *Eur Heart J.* 2013;34:816–826.  
 2. McDonagh T & Macdougall IC. Iron therapy for the treatment of iron deficiency and heart failure: intravenous or oral? *Eur J Heart Fail.* 2015;17(3):248–262.  
 3. Comin-Colet J, et al. Iron deficiency is a key determinant of health-related quality of life in patients with chronic heart failure regardless of anaemia status. *Eur J Heart Fail.* 2013;15:1164–1172.

4. NICE Quality Standards Acute Heart Failure (QS103). Available at: <https://www.nice.org.uk/guidance/qs103>.  
 5. Ganz T. Hepcidin and iron regulation, 10 years later. *Blood.* 2011;117(17):4425–4433.  
 6. Brownlie T, et al. Tissue iron deficiency without anemia impairs adaptation in endurance capacity after aerobic training in previously untrained women. *Am J Clin Nutr.* 2004;79:437–443.

7. Ponikowski P, et al. ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J.* 2016;37(27):2129–2200.  
 8. Anker SD, et al. Ferric carboxymaltose in patients with heart failure and iron deficiency. *N Engl J Med.* 2009;361:2436–2448.  
 9. Ponikowski P, et al. Beneficial effects of long-term intravenous iron therapy with ferric carboxymaltose in patients with symptomatic heart failure and iron deficiency. *Eur Heart J.* 2015;36(11):657–668.