Semaglutide improves heart failure-related symptoms and physical function and results in greater weight loss compared with placebo in patients with heart failure with preserved ejection fraction (HFpEF) and obesity.

The results indicate that obesity is not simply a comorbidity in patients with HFpEF but a root cause and a target for therapeutic intervention.

The STEP-HFpEF trial tested the hypothesis that treatment with semaglutide can significantly improve symptoms, physical limitations and exercise function, in addition to weight loss, in patients with HFpEF and obesity.

**Study population**

- **HFpEF patients**
  - left ventricular ejection fraction ≥45%
  - body mass index ≥30 kg/m²
  - HF symptoms
  - functional limitations (New York Heart Association functional class II–IV and Kansas City Cardiomyopathy Questionnaire Clinical Summary Score [KC-CQ-CSS] <90 points)

**Where?**

- 13 countries in Asia, Europe, North America and South America
- 96 sites

**Who and what?**

- 529 patients randomised 1:1
  - once-weekly for 52 weeks
  - semaglutide: 2.4 mg
  - placebo

**Primary endpoints**

- **change from baseline to week 52 in KCCQ-CSS**
  - mean change: 16.6 points
  - estimated treatment difference 7.8 points
  - 95% CI: 4.8 to 10.9
  - p<0.001

- **change from baseline to week 52 in body weight**
  - mean change: -13.3%
  - estimated treatment difference -10.7%
  - 95% CI: -11.9% to -9.4%
  - p<0.001

**Serious adverse events**

- Rate%
  - semaglutide: 13.3%
  - placebo: 26.7%
  - p<0.001