Semaglutide Improves Heart Failure and Cardiovascular Disease

People with heart failure with preserved ejection fraction who received a weekly 2.4-mg injection of semaglutide for 52 weeks experienced more substantial improvements in symptoms and physical function than those who received a placebo, according to a randomized clinical trial involving 529 participants with obesity. The participants who received semaglutide also lost an average of 13.3% of their body weight, almost 11 percentage points more than the placebo group.

There also were fewer adverse events among those who received the glucagon-like peptide-1 (GLP-1) receptor agonist, which is marketed for weight loss as Wegovy.

The heart failure improvements do not appear to be caused by an effect of the drug on heart muscle itself, which doesn’t appear to have GLP-1 receptors, but by upstream “metabolic drivers,” according to an associated editorial published in the New England Journal of Medicine.

Novo Nordisk, the drug’s manufacturer, also recently announced topline results from a trial investigating semaglutide’s effects on cardiovascular outcomes. The drug alongside standard of care treatment reduced major adverse cardiovascular events by 20% in the study, which involved 17,604 adult participants with cardiovascular disease and overweight or obesity. – Emily Harris

Published Online: September 6, 2023.

Note: Source references are available through embedded hyperlinks in the article text online.