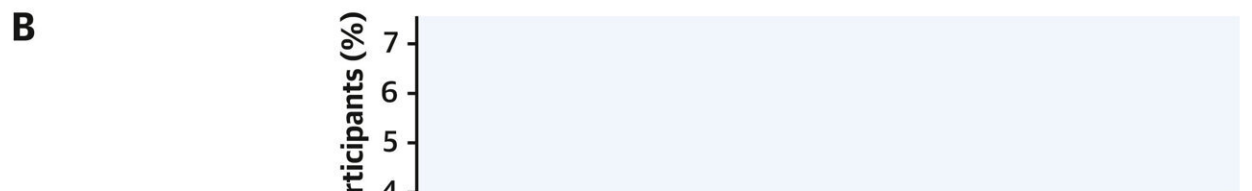
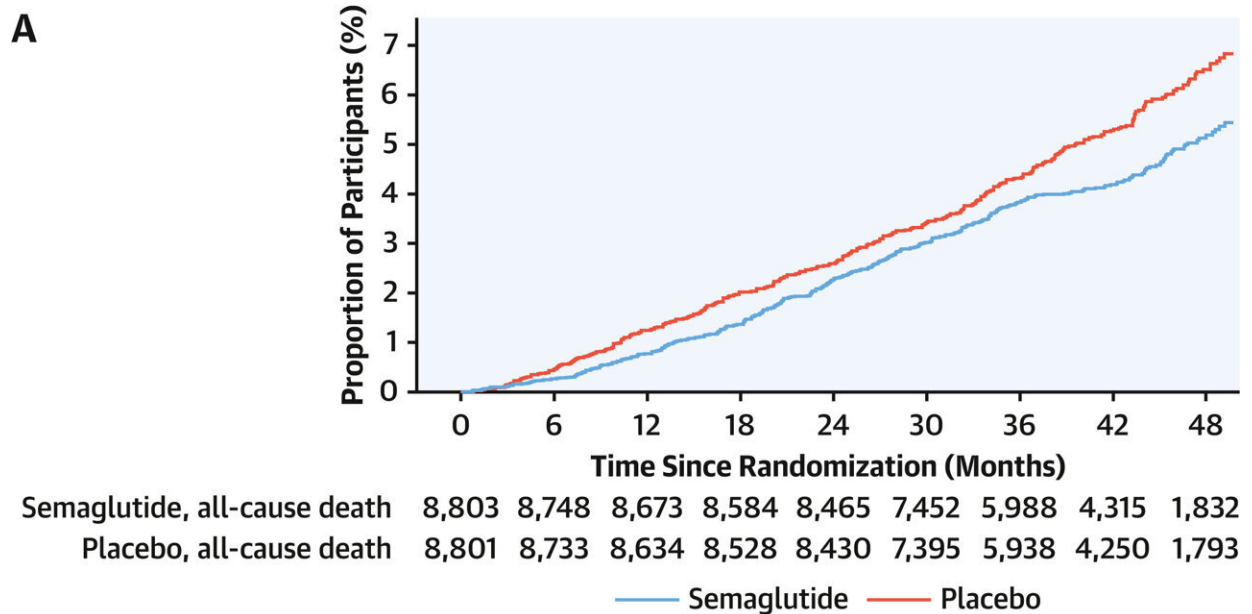


# Study finds weight loss drug semaglutide reduced COVID-19 related deaths during the pandemic

August 30 2024



Cumulative incidence of all-cause death, cv death, and non-cv death by treatment. Credit: *Journal of the American College of Cardiology* (2024). DOI: 10.1016/j.jacc.2024.08.007

Patients taking semaglutide injections are less likely to die of any cause, including from cardiovascular disease and infections like COVID-19, an international study led by researchers from Brigham and Women's Hospital, a founding member of the Mass General Brigham health care system, finds. The randomized, controlled SELECT Trial, funded by Novo Nordisk, studied the effect of once-weekly semaglutide shots versus placebo on mortality in over 17,000 participants with heart disease and overweight or obesity between October 2018 through March 2023.

Overall death rates in the group taking semaglutide were 19% lower compared to placebo. Deaths from [cardiovascular disease](#) were 15% lower, and deaths from other reasons were 23% lower. Results were presented at the European Society of Cardiology Congress 2024 and simultaneously [published](#) in the *Journal of the American College of Cardiology*.

"These results are surprising. The trial started before COVID-19, and we never anticipated a global respiratory pandemic. We quickly recognized there was important data to be collected," said corresponding author Benjamin M. Scirica, MD MPH, director of quality initiatives at Brigham and Women's Hospital's Cardiovascular Division and Professor of Medicine at Harvard Medical School.

"It is rare for a cardio-metabolic drug to modify non-cardiovascular outcomes. The fact that semaglutide reduced non-cardiovascular death, and in particular COVID-19-related deaths, was surprising. It opens up new avenues for exploring how this class of drugs may benefit patients."

Death from infection was the most common non-cardiovascular cause of death in the trial group. In the study, people taking semaglutide were just as likely to get COVID-19, but they had fewer serious adverse events or deaths related to COVID-19. The researchers do not know if the benefit

of semaglutide is due to weight loss or other effects. This result is from just one observation, albeit in a large, multinational study, so the findings need to be replicated.

Further studies will explore potential mechanisms of action, and other studies of drugs in this class should provide additional data.

In addition to Scirica, BWH researchers include Stephen D. Wiviott. Additional authors include, A. Michael Lincoff, Ildiko Lingvay, Pawel Bogdanski, Silvio Buscemi, Helen Colhoun, Anca-Elena Craciun, Marat Ezhov, Søren Hardt-Lindberg, Ole Kleist Jeppesen, Ana Laura S. A. Matos, Koichi Node, Francois Schiele, Hermann Toplak, André van Beek, Peter E. Weeke, John Deanfield, and Donna Ryan.

Scirica reports institutional research grants to Brigham and Women's Hospital from Better Therapeutics, Merck, Novo Nordisk, and Pfizer; consulting fees from Allergan, Amgen, Boehringer Ingelheim, Better Therapeutics, Elsevier Practice Update Cardiology, Esperion, Hanmi, Lexicon, and Novo Nordisk; and equity in health [at] Scale, and Doximity.

Novo Nordisk funded this study and was responsible for the [study design](#) in collaboration with the academic steering committee. They contributed to [data collection](#), analysis, and interpretation and participated in the preparation and review of the manuscript in collaboration with the authors.

**More information:** Benjamin M. Scirica et al, The Effect of Semaglutide on Mortality and COVID-19–Related Deaths, *Journal of the American College of Cardiology* (2024). [DOI: 10.1016/j.jacc.2024.08.007](#)

Provided by Brigham and Women's Hospital

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