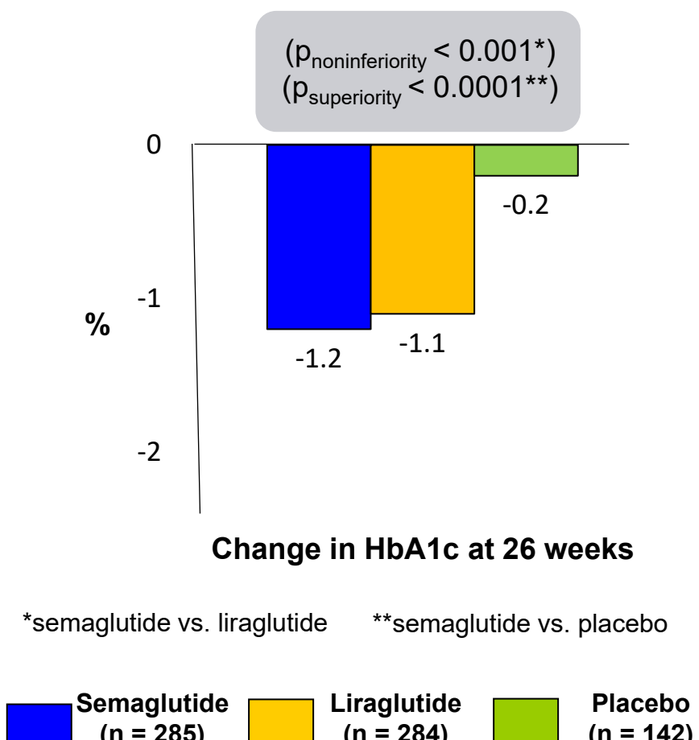
PIONEER 4

AMERICAN COLLEGE of CARDIOLOGY

Trial description: Patients with DM2 were randomized in a 2:2:1 fashion to oral semaglutide, subcutaneous liraglutide, or placebo once-daily with background glucose-lowering medication. Patients were followed for 57 weeks.



RESULTS

- Primary outcome, change in HbA1c at 26 weeks for semaglutide vs. liraglutide vs. placebo: -1.2% vs. -1.1% vs. -0.2% ($p_{noninferiority}$ < 0.001 for semaglutide vs. liraglutide; $p_{superiority}$ < 0.0001 for semaglutide vs. placebo)
- Weight loss at 26 weeks: -4.4 kg vs. -3.1 kg vs. -0.5 kg (p = 0.003 for semaglutide vs. liraglutide; p < 0.0001 for semaglutide vs. placebo)

CONCLUSIONS

- Oral semaglutide is noninferior to injectable liraglutide and superior to placebo in improving glycemic control and weight loss at 26 weeks among patients with DM2; results were sustained at 52 weeks of follow-up
- These are important findings since GLP-1 agonists such as semaglutide and liraglutide have been studied only in an injectable form so far due to poor oral bioavailability

Pratley R, et al. Lancet 2019;394:39-50