Two popular diabetes drugs outperformed others in large clinical trial



NIH-funded researchers complete first study comparing commonly used type 2 diabetes medications

The GRADE study compared four common diabetes drugs used to treat type 2 diabetes (T2D) to see which performed better when used in combination with metformin, the most common first-line treatment for managing T2D. The treatment goal was to maintain blood glucose levels in the recommended range.

Population

5,047 people with type 2 diabetes from diverse racial and ethnic groups who were already taking metformin were randomly assigned to one of four treatment groups.







After four years, all four medications improved HbA1c levels when added to metformin.

Insulin glargine and **liraglutide** were slightly more effective in achieving and maintaining target HbA1c levels. Participants taking metformin plus liraglutide or insulin glargine had about 6 additional months in range than participants taking sitagliptin.



However, 71% of participants were unable to maintain the blood glucose target over four years, underscoring the difficulty in maintaining recommended targets in many people with T2D.