

# Vildagliptin, sitagliptin have similar effects on incretin

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greater reductions in fasting plasma glucose after DPP-4 inhibition, L-cell [feedback](#) was more pronounced. Overall, K-cell feedback inhibition was not significant. No between-group differences were seen in any clinical parameters.

"Vildagliptin and sitagliptin affected incretin hormones, [glucose concentrations](#), insulin, and glucagon secretion in a similar manner," the authors write. "Inter-individual variations in L-cell feedback inhibition may indicate heterogeneity in the clinical response to DPP-4 [inhibition](#)."

Several authors disclosed financial ties to pharmaceutical companies, including Novartis Pharma, which manufactures vildagliptin and funded the study.

**More information:** [Abstract](#)

[Full Text \(subscription or payment may be required\)](#)

(HealthDay)—The dipeptidyl peptidase-4 (DPP-4) inhibitors vildagliptin and sitagliptin have similar effects on incretin hormone secretion, according to a study published online June 14 in *Diabetes, Obesity and Metabolism*.

Oleg Baranov, from the Diabeteszentrum Bad Lauterberg in Germany, and colleagues compared the clinical effects of vildagliptin and sitagliptin in 24 patients with type 2 diabetes (12 diet/exercise, 12 on metformin). Participants were treated in randomized order for seven to nine days with vildagliptin, sitagliptin, or placebo.

The researchers found that with vildagliptin and sitagliptin, intact glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide concentrations were doubled. In most patients, meal-related total GLP-1 responses were reduced by vildagliptin and sitagliptin treatment ( $P = 0.0005$  and  $0.019$ , respectively), with considerable inter-individual variation. In those with greater increases in intact GLP-1 relative to total GLP-1 and who had

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