Review compares outcomes, safety for once-weekly GLP-1RAs

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(HealthDay)—Cardiometabolic outcomes and safety vary among different once-weekly glucagon-like peptide-1 receptor agonist (GLP-1RA) treatments, according to a review published online Dec. 8 in the *Annals of Internal Medicine*.

Francesco Zaccardi, M.D., from the University of Leicester in the United Kingdom, and colleagues conducted a systematic review to summarize evidence for the cardiometabolic efficacy and adverse effects of once-weekly GLP-1RAs in adults with type 2 diabetes. Data were included from 34 trials with 21,126 participants.

The researchers found that all once-weekly GLP-1RAs reduced hemoglobin A1c (HbA1c) and fasting plasma glucose compared with placebo, while 20-mg taspoglutide, once-weekly exenatide, and 1.5-mg dulaglutide reduced body weight. Among once-weekly GLP-1RAs, the greatest differences for HbA1c; fasting plasma glucose; and body weight were found for 1.5-mg dulaglutide and 10-mg taspoglutide; once-weekly exenatide and albiglutide; and 20-mg taspoglutide and 0.75-mg dulaglutide, respectively. For blood pressure, blood lipid levels, and C-reactive protein levels, clinically marginal or no differences were observed. Compared with albiglutide and dulaglutide, once-weekly exenatide increased heart rate. The risk for hypoglycemia was similar among once-weekly GLP-1RAs, whereas 20-mg taspoglutide correlated with the greatest risk for nausea (odds ratios, 1.9 to 5.9).

"In conclusion, available data suggest differences in cardiometabolic outcomes and safety among once-weekly GLP-1RAs," the authors write. "Further randomized controlled trials with direct comparisons of once-weekly GLP-1RAs can help better clarify their comparative tolerability and efficacy and inform the choice among these newly available glucose-lowering agents."

Several authors disclosed financial ties to pharmaceutical companies, including Sanofi Aventis, which funded the study.

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