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Editor-in-Chief

*Dr. Hickner reported no potential conflict of interest relevant to this article.*

# These agents do double duty by reducing CV risk in diabetes

**I**n this issue of *JFP*, Skolnik et al discuss ways we can assist patients with type 2 diabetes mellitus (T2DM) in lowering their cardiovascular (CV) risk. It is well established that the main predictors of the development of CV disease in patients with T2DM are blood pressure (BP) and lipid levels. Many randomized controlled trials (RCTs) have demonstrated the benefit of lowering BP and lipid levels on reducing CV disease in these patients.

■ **The problem has been** that other than a modest CV benefit from metformin, no glucose-lowering drug has been shown to have a significant effect on CV outcomes—until recently. Now there is solid evidence from RCTs that treatment with one of

**For patients with T2DM who have established or are at high risk for CV disease, prescribing these drugs makes good sense.**

3 newer agents—empagliflozin (a sodium-glucose cotransporter [SGLT]-2 inhibitor), liraglutide, and semaglutide (both glucagon-like peptide [GLP]-1 receptor agonists)—is associated with reductions in CV morbidity and mortality for patients with T2DM who have established, or are at high risk for, CV disease. (Of note: Semaglutide is not yet on the market. Its manufacturer submitted a New Drug Application late last year.)

For empagliflozin, an RCT involving more than 7000 patients calculated that the number needed to treat (NNT) over a 3-year period to prevent one CV event was 63 and the NNT to prevent one death from any cause was 38.<sup>1</sup> For liraglutide, a double-blind trial involving over 9000 patients reported the NNT to prevent one CV event in 3 years was 53, and the NNT to prevent one death from any cause was 71.<sup>2</sup> The RCT for semaglutide involved more than 3000 patients and reported the NNT to prevent one major CVD event was 43, but there was no significant difference in CV mortality between the semaglutide and placebo groups in that clinical trial.<sup>3</sup>

■ **The jury is still out as to whether** all patients with T2DM should be treated with one of these drugs. Caveats include that for each agent, there is only one RCT on the subject, and all 3 studies were sponsored by the agents' manufacturers. Another caveat is the high cost for at least 2 of these agents. On the other hand, all 3 studies are well executed clinical trials that probably qualify as level I (high quality) evidence, according to SORT criteria.<sup>4</sup> For patients with T2DM who have established or are at high risk for CV disease, prescribing these drugs makes good sense.

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