Late Breaking Poster Session

Impact of SGLT2 Inhibitors (SGLT2i) on Cardiovascular (CV) Risk and Estimated Glomerular Filtration Rate (eGFR) in the EXSCEL Placebo Group

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Abstract

SGLT2i, empagliflozin and canagliflozin, have been shown to reduce the incidence of major adverse CV events (MACE), all-cause mortality (ACM) and renal events in CV outcomes trials (CVOTs), with robust real-world evidence (RWE) suggesting class effect benefits. In the exenatide CVOT EXSCEL, ~10% of patients took an SGLT2i with ~5% use of dapagliflozin (DAPA). Effects of all SGLT2i, and DAPA alone, on MACE, ACM, and eGFR were analyzed in EXSCEL participants randomized to placebo.

characteristics before SGLT2i initiation. Subsequent time-to-first adjudicated MACE and ACM were compared using a Cox regression. Decline in eGFR over time (slope) was quantified in the matched cohorts using a mixed model repeated measurement (MMRM) analysis.

SGLT2i overall, and DAPA alone, numerically decreased the MACE hazard ratio, and SGLT2i significantly reduced the ACM risk (Table). The eGFR slope was improved significantly for SGLT2i overall and DAPA alone (Table).

This post-hoc EXSCEL analysis supports a beneficial class effect for SGLT2i on MACE, ACM, and renal function, consistent with published CVOTs, Real-World data, and for DAPA alone. DECLARE, the ongoing DAPA CVOT, will complete in 2018.

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