The growing prevalence of type 2 diabetes mellitus (T2DM) in Europe poses a significant economic and health care burden, mainly due to diabetes-related complications.

Augmenting existing therapies with medicines that have alternative modes of action in terms of glucose lowering, and benefits in terms of other micro- and macrovascular risk factors beyond HbA1c reduction (eg, weight loss and blood pressure [BP] reduction) may improve outcomes in patients with T2DM.

Maintaining HbA1c <7.0% has been shown to lower the risk of T2DM-related complications in the longer term. There is no clear consensus with regard to the HbA1c target to achieve for T2DM patients. For ease of interpretation, P ≤30% and P ≥70% were chosen for the analysis. The network had treatment- and dose-specific nodes. The outcome of interest was the proportion of patients reaching the HbA1c target at 26 ± 4 weeks as add-on to MET + SU (Figure 1).

Two trials assessed CANA 300 and 100 mg as add-on to MET + SU for 26 weeks (1 trial was placebo [PBO] controlled and the other versus the active treatment SITA 100 mg).6,7 One trial assessed empagliflozin (EMPA) 10 and 25 mg versus PBO,4 and 1 trial that assessed dapagliflozin (DAPA) 10 mg versus PBO was identified through hand searches.8

The fixed-effect model was selected for the analysis of the proportion of patients reaching HbA1c <7.0%. Odds ratios (ORs), Bayesian pairwise probabilities (P; ie, Bayesian probability for CANA to be more effective versus comparator), and 95% CrIs were used to compare the effectiveness of treatments. Bayesian network meta-analysis (NMA) can provide useful insights to clinicians and reimbursement decision makers on the relative efficacy of treatments in the head-to-head data.

A systematic literature review (SLR) and Bayesian NMA were conducted to assess the relative efficacy of CANA versus other AHAs. This poster focuses on the comparisons between CANA and other agents that inhibit SGLT2 as add-on to metformin (MET) plus sulphonylurea (SU).

Proportion of Patients Reaching HbA1c <7.0% (Figures 2 and 3)

CANA 300 mg ranked first among the assessed treatments based on the SUCRA (values not shown). Patients treated with CANA 300 mg had higher odds of reaching HbA1c <7.0% versus DAPA 10 mg and EMPA 25 and 10 mg (ORs of 2.03 [P = 94%], 1.71 [P = 93%], and 2.29 [P = 99%], respectively). CANA 100 mg had similar odds of reaching HbA1c <7.0% compared to DAPA 10 mg and EMPA 25 mg (95% Crl: 19%, 41%) and OR of 1.94 (P = 44%), and higher odds versus EMPA 10 mg (OR of 1.26 [P = 73%]).

The proportion of patients treated to target was 41% (95% credibility interval [Crl]: 31%, 51%) with CANA 300 mg and 27% (95% Crl: 19%, 38%) with CANA 100 mg. With DAPA 10 mg, 25% (95% Crl: 15%, 41%) of patients reached HbA1c <7.0%, and 28% (95% Crl: 19%, 41%) and 23% (95% Crl: 15%, 34%) of patients treated to CANA 100 mg reached HbA1c <7.0% with EMPA 25 and 10 mg, respectively.

CONCLUSION

This NMA of add-on therapies to MET + SU suggests that the odds of achieving HbA1c <7.0% at 26 weeks were at least similar for CANA 100 mg and greater for CANA 300 mg versus DAPA and EMPA.