Background
- Basal insulin (BI) and glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are increasingly being used in combination therapy.
- Combination insulin injectable therapy, such as treatment with insulin and GLP-1 RAs, may be recommended as initial therapy in patients with glycated haemoglobin (HbA1c) >10% or in patients with elevated HbA1c after 3 months of triple therapy or when initiation of insulin alone did not succeed.

Aim
- To better understand the clinical efficacy of iGlarLixi compared with insulin combination options, especially premix insulins, in patients with T2D inadequately controlled on BI (Figure 1).

Methods
- A systematic literature review was conducted to find eligible studies matching specific predefined criteria for Population, Intervention, Comparator, Outcome, and study design (PICO[S]) criteria – Table 1. In addition, a manual search of the reference list of eligible studies was performed.

Results
- Out of 4104 citations identified by the search, 8 clinical trials with a cumulative population of 2837 matched the criteria to be included in this analysis (Figure 2).
- iGlarLixi was used as an active intervention arm in one RCT (n=367), BI in five RCTs (n=1038), basal-bolus insulin in six RCTs (n=969), and premix insulin (twice daily or three times daily) in four RCTs (n=725) (Figure 3).

Conclusions
- This NMA revealed that iGlarLixi allows comparable control over HbA1c, and a greater advantage for preventing weight gain in comparison with premix-based insulin therapy.
- Overall, these results yield an efficacy profile for iGlarLixi that provides further information for the benefit-risk profile for treatment intensification with iGlarLixi in patients not reaching glycaemic targets with BI.
- Safety findings on outcomes such as gastrointestinal events and hypoglycaemia were inconclusive, and would benefit from detailed further analyses in future publications.
- NMA comparisons as reported here provide valuable insights into emerging therapies, especially in the absence of head-to-head trial data to illustrate comparisons against the full range of therapies.

In addition, as real-world evidence emerges from the clinical use of iGlarLixi and the results of analyses of treatment intensifications, it will be interesting to consider further comparisons.