changes in treatments’ effect on weight and HbA1c, and in utility values related to weight gain. However, this model’s higher health benefits and cost savings are mainly explained by its greater beneficial effect on weight, leading to higher QALYs and less drug costs for dapagliflozin patients. The lower treatment costs are related to the insulin treatment costs (i.e. subsequent line regimens) due to the lower weight of dapagliflozin, whereas, as expected, treatment with dapagliflozin resulted in a lower utility during the baseline and incremental QALYs.

CONCLUSIONS: Dapagliflozin is a cost-saving strategy with higher health benefits compared to DPP4, added to metformin, for Turkish T2DM patients inadequately controlled on metformin mono-therapy.

PD58
A SYSTEMATIC REVIEW OF COST-EFFECTIVENESS MODELS IN TYPE 1 DIABETES MELLITUS

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OBJECTIVES: economic modelling in type 1 diabetes mellitus (T1DM) is complex and continuously evolving. The aim of this systematic review was to assess methodological capabilities of T1DM models. METHODS: A systematic search was undertaken using 5 databases. Study inclusion was based on a pre-specified protocol and carried out by a team of reviewers and information scientists independently, and data was extracted focusing on methodological capabilities. RESULTS: 74 publications describing 13 unique models were identified. Most models employed a Markov structure, and all included microvascular complications which were included both macrovascular and microvascular complications. Patient-level (microsimulation) and cohort approaches were equally common. While naturally varying across models, the risk equations (or simulated events) were generally based on a small set of studies which are now more than 20 years old. Treatment-effects were simulated in several ways; the more comprehensive models used surrogate risk factors (mostly HbA1c) to model instead of other approaches relying on modelling compensation, rate-quality, quality-of-life, and/or resource use. The most common adverse events included in the models were hypoglycaemia and ketoacidosis. Although the details provided varied, five models explicitly reported probabilistic sensitivity analyses. There was considerable heterogeneity in the models, likely driven by varying intended uses. The sub-set of models clearly intended for cost-effectiveness applications used more sophisticated approaches to capturing uncertainty compared to those not specifically interested in micro- and macrovascular outcomes and common treatment-related adverse events. These models are likely to provide the most useful set of model capabilities despite relying on aging risk equations.

PD59
THE-COST-EFFECTIVENESS-OF-CANAGLIFLOZIN (CANA) VERSUS DAPAFLGLOZIN (DAPA) 10mg AND EMPAGLIFLOZIN (EMPA) 25mg IN PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM) AS MONOTHERAPY IN THE UNITED KINGDOM

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OBJECTIVES: To estimate the cost-effectiveness of using CANA versus DAPA or EMPA, three agents that inhibit sodium glucose co-transporter 2 (SGLT2), as monotherapy from a UK NHS perspective (ICER). The primary analyses were used to estimate 40-year outcomes and costs associated with using CANA 100 or 300mg versus DAPA 10mg or EMPA 25mg. A 26-week network meta-analysis (NMA) performed to support a NICE multiple technology assessment was used to populate the model with treatment effects for HbA1c, blood pressure, weight and rates of hypoglycaemic events (hypoglycaemia data for EMPA were not possible to report from the NMA). Changes in lipids and rates of adverse events (AEs) associated with DAPA versus DPP4, added to metformin, were assessed through a cost-effectiveness analysis (CEA) from a Turkish payer perspective. METHODS: For the current CEA, a micro-simulation disease model was used. The model was calibrated on US data. The model predicted micro- and macro-vascular complications based on the UKPDS equations (ICER). The model was run for a total of 40 years using QALYs up to the age of 85. Sensitivity analyses supported these base case findings. CONCLUSIONS: Through an insulin-independent mechanism of action, agents that inhibit SGLT2 improve glucose levels, blood pressure, and weight, with a lower inherent risk of hypoglycaemia. These results suggest that both CANA 100mg and 300mg are likely to be cost-effective monotherapy options versus EMPA and DAPA in the UK.

PD60
COST-EFFECTIVENESS ANALYSIS OF GESTATIONAL DIABETES MELLITUS SCREENING IN URBAN CHINA

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OBJECTIVES: Gestational diabetes mellitus (GDM) is associated with elevated risk of severe perinatal complications and type 2 diabetes (T2DM). Screening and intervention is recognized as an effective way to reduce these risks. The prevalence rate of GDM in Asia, which is the highest in the world, is a serious public health burden. GDM screening and intervention was reported in many hospitals in China, however, lacking evaluation from an economic perspective up to now. The objective was to estimate the long-term cost-effectiveness associated with GDM screening in the urban Chinese setting to provide economic evidence for clinical practice and