domed clinical trial (Nauck et al. 2011, 52 weeks) comparing DAPA + MET vs SU+MET. This study determined the proportion of patients achieving 7 clinically relevant composite endpoints (CEP) including: changes in HbA1c, weight, hypoglycemic events and systolic blood pressure (SBP). Additionally, it was calculated the cost per patient that achieved CEP. RESULTS: Patients treated with DAPA + MET had a higher probability to meet CEP than those on SU+MET. In the case of CEP combining HbA1c<7%, no hypoglycemic events and ≥5% weight loss: 96% DAPA + MET and 4% SU+MET achieved it and were approximately 22 times more likely to achieve this CEP vs. SU+MET. In the case of CEP combining HbA1c<7%, no hypoglycemic events and ≥3% weight loss: 92% patients treated with DAPA + MET and 8% with SU+MET achieved it and the probability was 11 times higher with DAPA + MET. And in CEP combining HbA1c<6.5% ≥0.5% weight loss ≥3 mmHg: 91% patients treated with DAPA + MET achieved it and 9% with SU+MET and the probability was 10 times higher. The cost per patients achieved different CEP was between €3.058 and €3.386 with DAPA + MET, whereas patients with SU+MET achieved the costs €3.035 and €3.013 respectively. Patients without hypoglycemia had the highest utility value whereas patients with severe hypoglycemia the lowest one. Finally, increased utility values were calculated with nocturnal hypoglycemic event – 0.657. Patients without hypoglycemia had the average utility for patients with corresponding type of hypoglycemia.

The disutility for one episode of each type of hypoglycemia was determined as €0.7 to €1.2 per episode of severe hypoglycemia and €0.2 to €0.4 for not severe nocturnal hypoglycemia. The obtained values of health utility and disutility may be used in cost-utility analysis to estimate treatment outcomes for T2DM.

**PDB74**

**COST-EFFECTIVENESS OF RAPID-ACTING ANALOG INSULIN FOR TYPE 1 DIABETES IN THE REAL-WORLD SETTING**

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**OBJECTIVES:** Reimbursement agencies in Europe have questioned the benefits offered by rapid-acting analog insulin (RAAI) over regular human insulin (RHI) in type 1 diabetes (T1D). This analysis evaluates the cost-effectiveness of RAAI relative to RHI using a T1D-specific health economic model developed using recently published clinical data.

**METHODS:** The PRIME Diabetes Model — a patient-level, deterministic, discrete-event simulation, was used to simulate the cost effectiveness of RAAI versus RHI in adults (≥ 18 years) with type 1 diabetes from the perspectives of a health system and region, and from a payee and payer perspective. Patient characteristics of the base case were age 36.8 years, 60% male, metformin in the canagliflozin Phase 3 program. In both analyses, only direct medical costs both for normal pregnancy and associated complications, based on base cases designed by an expert panel, and resource use turned into prices using official tariff manuals. Time frame was from gestational week 24 until one month after delivery. Results were subject to univariate and probabilistic sensitivity analyses.

**Costs:** Health and costs were derived from local sources. Uncertainty was assessed by deterministic sensitivity analysis. The analysis showed that more patients treated with DAPA + MET in comparison with SU+MET achieved the CEP considered after one year of treatment, and it was also associated with a lower cost per patient.

**PDB73**

**HEALTH UTILITIES ASSOCIATED WITH HYPOGLYCEMIC EVENTS IN TYPE 2 DIABETES MELLITUS (T2DM) PATIENTS RECEIVING BASAL-BOLUS INSULIN THERAPY**

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**OBJECTIVES:** Hypoglycemia is one of the major limiting factors in the management of T2DM patients on insulin. Disutility for different types of hypoglycemic events is an important component of cost-utility analysis. The aim of this study was to determine the disutility for mild, severe and nocturnal hypoglycemic events in T2DM patients receiving insulin therapy. METHODS: One thousand T2DM patients on insulin (mean age −61.1 yrs; male/female – 265/735) were included in the real-world study aimed to measure their quality of life and hypoglycemia burden. All the patients completed SF-36 questionnaire. To determine the utility value for each patient SF-6D questionnaire based on the SF-36 was used. In total, 631 patients recorded episodes of hypoglycemia during the last month. The patients without hypoglycemia and patients with mild, severe or nocturnal hypoglycemic events were analyzed. The average utility value for each group was calculated with adjustment for gender, age, comorbidities, late complications, glycosylated hemoglobin level. The obtained values for each CEP were used to calculate the weighted mean utility. It was used to determine the difference between the average utility for patients without hypoglycemia and average utility for patients with corresponding type of hypoglycemia. RESULTS: The utility values for patients without hypoglycemia was 0.680; patients with mild hypoglycemia – 0.668; for patients with severe hypoglycemia – 0.595; for patients with nocturnal hypoglycemic event – 0.657. Patients without hypoglycemia had the highest utility value whereas patients with severe hypoglycemia the lowest one. One CEP calculated the cost per patient that achieved this CEP vs. SU+MET. The obtained utility values for patients with mild hypoglycemia – 0.680; patients with severe hypoglycemia – 0.595; for patients with nocturnal hypoglycemic event – 0.657. Patients without hypoglycemia had the highest utility value whereas patients with severe hypoglycemia the lowest one. Final utility values for patients with mild hypoglycemia was 0.680; patients with severe hypoglycemia – 0.595; for patients with nocturnal hypoglycemic event – 0.657.