(BMI) (−0.3 kg.m^{-2}) in comparison to neutral protamine Hagedorn insulin + human soluble insulin (NPH/HSI). The aim of this study was to project the long-term clinical and cost outcomes associated with IDet/IAsp versus NPH/HSI basal/bolus therapy in the German setting based on these findings. **METHODS:** A published, validated and peer-reviewed model that combines Markov sub-models and Monte Carlo simulation was used to simulate the progression of diabetes and its complications (cardiovascular disease, neuropathy, renal and eye disease). Transition probabilities and HbA1c-dependent adjustments were derived from published sources. Baseline cohort characteristics and treatment effect data were based on the clinical study. Direct costs were retrieved from published sources and projected over patient lifetimes from a German National Health care perspective. Costs and clinical benefits were discounted at 3.5% annually. **RESULTS:** IDet/IAsp treatment was associated with fewer diabetes-related complications, improved life expectancy (0.23 life years gained) and quality-adjusted life expectancy (0.21 QALYs gained) compared to NPH/HSI. Mean total lifetime costs were €3165 per patient higher with IDet/IAsp, leading to incremental cost-effectiveness ratios (ICERs) of €13,761 per life year and €15,071 per QALY gained. **CONCLUSIONS:** Short-term clinical benefits in glycemic control, hypoglycemic event rates and BMI associated with IDet/IAsp basal/bolus therapy were projected to lead to fewer complications, improved life expectancy and quality-adjusted life expectancy compared to NPH/HSI. This resulted in ICERs for IDet/IAsp versus NPH/HSI in the range considered to represent good value for money.

PDB22

ASSESSING THE EFFICIENCY OF USING CONTINUOUS SUBCUTANEOUS INSULIN-INFUSION (CSII) VERSUS MULTIPLE DAILY INJECTIONS (MDI) IN SPANISH DIABETES MELLITUS TYPE-1 (DM1) PATIENTS. COST—EFFECTIVENESS ANALYSIS

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Diabetes Mellitus type-1 (DM1) is a high-incidence, chronic disease that increases morbidity and mortality, in Spain 5000 new diagnosed patients per year have been estimated. DM1 chronic complications are the main cause of resource health care utilization and death among diabetic patients. DM1 is one of the most important causes of death, occupying third place for women and seventh for men in our country. Continuous Subcutaneous Insulin Infusion (CSII) reduces incidence of Diabetes-related complications when compared with Multiple Daily Injections (MDI) for Type-1. **OBJECTIVE:** The aim of the study was to project the costs and clinical benefits of CSII vs. MDI in the long term for DM1 patients in Spain. **METHODS:** An adaptation of the CORE diabetes model was carried out for the Spanish setting. Clinical and economic data were retrieved from published studies and SOIKOSTM Spanish's health care cost database. The analysis was run over a lifetime horizon from a NHS perspective, and direct costs and benefits were actualized to euros 2004 and discounted at 3% annum. **RESULTS:** Preliminary results showed that treatment with CSII was associated with an improvement in life expectancy (LE) of 0.859 and 0.836 Quality-Adjusted Life-Years (QALY's), compared to MDI. This was accompanied by decreases in cumulative incidence of complications. Mean total lifetime costs were 25,463 € more expensive with CSII treatment vs. MDI. This results in an incremental cost effectiveness ratio of 30,453 €/QALY with CSII compared to MDI group. **CONCLUSION:** Improvements in glycemic control associated with CSII vs. MDI lead to increase LE and QoL due to reduced incidence of diabetes-related complications. CSII is cost effective compared to MDI according to accepted Spanish threshold.

PDB23

ECONOMIC EVALUATION OF DETEMIR-BASED BASAL/BOLUS THERAPY VERSUS NPH-BASED BASAL/BOLUS THERAPY FOR TYPE-1 DIABETES IN GERMANY

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OBJECTIVES: In a recent randomized, controlled clinical study in 447 patients with type-1 diabetes, use of insulin detemir (IDet) versus neutral protamine hagedorn (NPH) insulin in a basal (twice daily)/bolus regimen with insulin aspart (IAsp) as bolus insulin, demonstrated that IDet/IAsp was associated with a risk reduction of 22% for hypoglycemic events ($p = 0.029$), a reduction of 0.2 kg in body weight ($p < 0.001$) and decreased systolic blood pressure (SBP) (3 mmHg, $p < 0.001$) versus NPH/IAsp over 6 months of treatment. No significant difference in HbA1c was noted. The aim of this analysis was to assess the impact of these changes over long-term treatment with IDet/IAsp versus NPH/IAsp. **METHODS:** A peer-reviewed, validated computer simulation model was used to project these short-term findings to evaluate long-term clinical and cost outcomes. Transition probabilities and risk adjustments were derived from published studies. Baseline cohort characteristics were taken from the clinical trial. Total direct costs (complications + treatment costs) were derived from published sources and projected over patients' lifetimes from a German National Health care perspective. Costs and clinical benefits were discounted at 3.5% annually. **RESULTS:** Decreased incidence of hypoglycemic events, improved BMI and SBP associated with IDet/IAsp treatment led to fewer diabetes-related complications, increased life expectancy (0.15 years) and improved quality-adjusted life expectancy (0.22 QALYs) compared to NPH/IAsp. Mean total lifetime costs were €1204 per patient higher in the IDet/IAsp treatment arm than in the NPH/IAsp group, leading to incremental cost-effectiveness ratios of €8027 per LYG and €5473 per QALY gained. **CONCLUSIONS:** Short-term clinical improvements associated with IDet/IAsp were projected to lead to a lower incidence of complications, improved life expectancy and quality-adjusted life expectancy compared to NPH/IAsp. Reductions in the cost of complications partially offset the costs of IDet/IAsp treatment, leading to incremental cost-effectiveness ratios within the range considered to represent good value for money.

PDB24

ASSESSMENT OF THE LONG-TERM COST-EFFECTIVENESS OF INSULIN ASPART + METFORMIN VERSUS HUMAN INSULIN + METFORMIN REGIMENS IN TYPE-2 DIABETES IN GERMANY BASED ON THE CLINICAL FINDINGS OF THE PHAZIT STUDY

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OBJECTIVES: To evaluate the long-term clinical and cost outcomes associated with insulin aspart + metformin (IAsp/MET) versus human insulin + metform (HI/MET) in patients with Type-2 diabetes in a German setting based on the findings of the PHAZIT clinical trial. **METHODS:** Long-term outcomes were