projected using a peer-reviewed and validated computer simulation model of diabetes. Clinical input (cohort characteristics and treatment effects) were taken from PHAZIT, a prospective, non-randomized, observational study of Type-2 diabetes patients from 51 German diabetes centers. In PHAZIT, patients were switched to a combination of IAsp/MET (n = 392) or HI/MET (n = 353) at baseline. 24-week results showed an improvement in HbA1c of 0.15% and decreased body mass index (BMI) (0.3 kg/m^2) with IAsp/MET versus HI/MET. No significant changes in hypoglycemic event rates were observed. Transition probabilities in the model and HbA1c-dependent adjustments were derived from published sources. Direct costs were retrieved from published data and accounted over patient lifetimes. Costs and clinical benefits were discounted at 3.5% annually. **RESULTS:** Long-term projections showed that IAsp/MET treatment was associated with fewer diabetes-related complications, improved life expectancy (0.13 life years gained) and quality-adjusted life expectancy (0.09 QALYs gained) compared to HI/MET. Mean total lifetime costs were €1,173 per patient higher with IAsp/MET, leading to incremental cost-effectiveness ratios (ICERs) of €9,023 per life year gained and €13,033 per QALY gained. **CONCLUSIONS:** Based on data from the 24-week PHAZIT trial, improvements in glycemic control and BMI associated with IAsp/MET were projected to lead to fewer diabetes-related complications, as well as improved life expectancy and quality-adjusted life expectancy compared to HI/MET. Incremental cost-effectiveness analysis indicated that IAsp/MET was within range taken to represent good value for money compared to HI/MET in the treatment of Type-2 diabetes over patient lifetimes in the German setting.

PDB25

FIXED COMBINATION METFORMIN PLUS GLIBENCLAMIDE (GLUCOVANCE®) IS COST AND LIFE SAVING COMPARED TO METFORMIN PLUS ROSIGLITAZONE IN TYPE-2 DIABETES PATIENTS IN FRANCE

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OBJECTIVES: To evaluate the cost-effectiveness of oral antidiabetic therapies, a fixed combination (metformin plus glibenglamide, Glucovance®) and a free combination (metformin plus rosiglitazone), in France. **METHODS:** A peer-reviewed, published, validated computer simulation model was used to project long-term clinical and cost outcomes of treatment with Glucovance® or metformin + rosiglitazone. The model combined standard Markov sub-models to simulate the incidence and progression of complications and calculate costs over patients' lifetimes. Transition probabilities and risk adjustments were derived from published sources, including the UKPDS. Treatment effects, average doses and baseline cohort characteristics were taken from a recent double-blind randomized clinical trial showing that Glucovance® resulted in significantly greater reductions in HbA1c (–0.4%) compared with metformin + rosiglitazone in Type-2 diabetes patients inadequately controlled on metformin monotherapy. Direct costs (2004 Euros) were retrieved from published sources and projected over patient lifetimes from a third party health care payer perspective. Costs and clinical benefits were discounted at 3% annually. **RESULTS:** In the long-term, Glucovance® treatment was associated with improvements in discounted life expectancy (0.19 years) and quality-adjusted life expectancy (0.18 years) compared to metformin + rosiglitazone. Undiscounted life expectancies were 14.73 and 14.40 years in the Glucovance® and metformin + rosiglitazone groups respectively. Diabetes-related complications were delayed by an average of 0.3 years in the Glucovance® arm. Lifetime direct costs (treatment and complication costs) were on average less expensive with Glucovance® than with metformin + rosiglitazone (by €5605 per patient). At a shorter time horizon of 10 years, Glucovance® treatment was also projected to be associated with improved life expectancy and lower total costs than metformin + rosiglitazone. **CONCLUSIONS:** In France, Glucovance® is dominant to metformin + rosiglitazone over medium and long-term time horizons, leading to improvements in life expectancy, quality-adjusted life expectancy and cost savings in Type-2 diabetes patients inadequately controlled on metformin monotherapy.

PDB26

COMPARATIVE EVALUATION OF THE LONG-TERM COST-EFFECTIVENESS OF BIPHASIC INSULIN ASPART 30 AND INSULIN GLARGINE IN A SUB-POPULATION OF POORLY CONTROLLED PATIENTS WITH TYPE-2 DIABETES RECEIVING ORAL ANTIDIABETIC AGENTS

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OBJECTIVES: To project the long-term clinical and economic outcomes of intensive treatment with either biphasic insulin aspart 30 (BIAsp30) or insulin glargine among Type-2 diabetes patients exhibiting particularly high HbA1c levels when taking oral antidiabetic therapy alone. **METHODS:** Baseline characteristics and end-of-study treatment effect data among a sub-population of insulin naïve Type-2 subjects with baseline HbA1c levels ≥ 8.5% (mean HbA1c: 10.2%) were derived from a multicenter, 28-week, head-to-head clinical trial (INITIATE). Significant improvements in HbA1c levels favoring randomization to twice-daily BIAsp 30 + metformin (met) ± thiazolidinedione (TZD) compared to bedtime insulin glargine + met ± TZD were demonstrated (–0.53% between arms; $p < 0.005$). A peer-reviewed, validated Markov/Monte-Carlo model combining published literature for risk of long-term diabetic complications with quality-of-life utilities projected the incremental cost-effectiveness ratio (ICER) and cumulative incidences of diabetes-related complications over 35 years. Cost-effectiveness was measured as cost per life years gained (LYG) and cost per quality adjusted life years gained (QALY). Cardiovascular, neurological, renal, and retinal complication rates were assessed. Lifetime costs were calculated as the annual direct pharmacy costs plus complication costs (US Medicare perspective). Clinical outcomes and costs were discounted at 3% annually. Sensitivity analyses were performed. **RESULTS:** Improvements in glycemic control corresponded with incremental increases in LYG and QALY favoring BIAsp 30 versus glargine (0.28 ± 0.21 and 0.27 ± 0.15 years, respectively). Treatment with BIAsp 30 was associated with reductions in the cumulative incidence of diabetes-related complications, notably in renal (18% less end-stage renal disease) and retinal (12% less severe vision loss) co-morbidities. An ICER of $30,924 per QALY gained was deduced. Sensitivity analyses support the reliability of the results. **CONCLUSIONS:** Among a sub-population of poorly controlled insulin naïve Type-2 patients, BIAsp 30 was estimated to reduce lifetime complication incidences and be cost-effective within commonly supported thresholds when compared to insulin glargine.