for intervention and treatment, and also production loss of patients as indirect costs. **RESULTS:** A total of 185 questionnaires on SF-36 and EQ-5D were returned (88 stepped, 97 ordinary). There was no statistically significant difference between the scores of two groups. The expected costs a patient in the decision model were estimated as US$4072 (US$ = JPY110) for the stepped care, and US$2695 for the ordinary care with the discount of 3% a year in three years. The incremental cost-effectiveness ratio was US$17,636 in terms of cost per patient prevented from becoming Type-2 diabetes. **CONCLUSIONS:** The analysis on the JDPP intermediate report suggested that the stepped care resulted in increased costs for prevention comparing to the ordinary care in three years, maintaining the same level of QOLs in both groups.

PDB14

COST-EFFECTIVENESS OF MONO- AND COMBINATION THERAPY WITH PIOGLITAZONE COMPARED TO GLICLAZIDE IN PATIENTS WITH TYPE-2-DIABETES MELLITUS FROM A GERMAN STATUTORY HEALTH CARE PERSPECTIVE

Schramm W[1], Neeser K[2], Mast O[2], Lübben G[3], Lütke A[4]
[1]Eumedes, Krailling, Germany; [2]IMIB—Institute for Medical Informatics and Biostatistics, Basel, Switzerland; [3]Takeda Pharma GmbH, Aachen, Germany; [4]Med. In. Form, Scharbeutz, Germany

OBJECTIVES: Pioglitazone (PIO), a PPARã-Agonist has been approved in Germany for treatment of patients with Type-2-diabetes in mono-and combination therapy with either meformin (MET) or sulfonylurea. Long-term studies with a treatment period of 104 weeks involving 1197 patients comparing PIO with Gliclazide (GLIC) have recently been published. These studies revealed a superior effect of PIO in sustaining the HbA1C reduction compared to GLIC. Whether this translates to benefits with regard to cost-effectiveness is currently unknown. **METHODS:** This study compared the clinical effects and costs of PIO (15–45 mg) combination therapy (MET) and 30–45 mg monotherapy with GLIC + MET or GLIC monotherapy, respectively. The validated IMIB Markov diabetes model was adapted. The mean time transferring a patient to insulin therapy (MIT), life expectancy (LE and ÄLE), the related NNT to avoid 1 event/1 death and the incremental cost-effectiveness as cost per life year gained (C/LYG) discounted at 0% and 5% were calculated. **RESULTS:** In monotherapy PIO was associated with a higher MIT 11.70 vs. 11.39 years and a LE of 15.90 vs. 15.45 years (ÄLE: 0.44 years) vs. GLIC. For PIO vs. GLIC the NNT to avoid 1 event and 1 death were 32 and 54, respectively. When leaving the C/LYG undiscounted, PIO dominated GLIC and amounted to 2997€ (5%) vs. GLIC. In combination therapy PIO + MET was associated with a higher MIT 9.73 vs. 9.23 years and a LE of 15.58 vs. 14.94 years (ÄLE: 0.64 years) compared to GLIC + MET. For PIO + MET vs. GLIC + MET the NNT to avoid 1 event and 1 death were 28 and 36, respectively. The C/LYG for PIO + MET was calculated with 1445€ (0%) and 5480€ (5%) vs. GLIC + MET. **CONCLUSIONS:** The study indicates that PIO in mono, as well as in combination therapy, is preferable in terms of health outcomes and cost-effectiveness compared to GLIC in patients with Type-2-diabetes.

PDB15

A COST-EFFECTIVENESS ANALYSIS OF SWITCHING TYPE-2 DIABETES PATIENTS FROM IMMEDIATE-RELEASE METFORMIN (GLUCOPHAGE®) TO A NEW EXTENDED-RELEASE FORMULATION OF METFORMIN (GLUCOPHAGE®XR)

Renaudin C[1], Roze S[2], Valentine WJ[2], Palmer AJ[2]
[1]Merck Santé, Lyon, France; [2]CORE Center for Outcomes Research, Binningen/Basel, Switzerland

OBJECTIVES: Glucophage®XR is a new extended-release formulation of metformin which permits once-daily medication. Clinical studies show that Glucophage®XR demonstrate the same antihyperglycemic efficacy as immediate-release metformin (Glucophage®). However, in a retrospective chart review, patients with type 2 diabetes experienced fewer GI side effects and comparable or better glycemic control, based on HbA1C measurement, when switched from Glucophage® to Glucophage®XR. Mean HbA1c values were 7.8%-points before the switch and 7.5%-points afterwards. The CORE Diabetes Model, a peer-reviewed, validated, model was used to project the long-term cost-effectiveness of switching patients from Glucophage® to Glucophage®XR. **METHODS:** The CORE Diabetes model employs standard Markov/Monte Carlo simulation techniques to describe the long-term incidence and progression of diabetes-related complications. Transition probabilities were derived from major diabetes studies. Clinical effects of switching from Glucophage® to Glucophage®XR were derived from a retrospective database study. The analysis was performed using published UK-specific costs, health care resource utilization, clinical data and recommended discount rates of 3.5% for costs and clinical outcomes. A lifetime horizon and NHS payer perspective was taken. Only direct costs were considered. Sensitivity analyses were performed. **RESULTS:** Switching patients from Glucophage® to Glucophage®XR was projected to improve life expectancy by 0.10 years, quality-adjusted life expectancy by 0.09 years, and decrease overall lifetime costs by ≤201/patient. Results were most sensitive to variations in assumptions about changes in HbA1c when patients are switched from Glucophage® to Glucophage®XR, and the relative costs of treatment. **CONCLUSIONS:** In real life, due to improved tolerability, compliance, and glycemic control, switching patients from Glucophage® to Glucophage®XR may improve longterm patient outcomes and lead to overall cost savings.

PDB16

EFFECT OF PATIENT EDUCATION IN TYPE-2 DIABETES OVER 10 YEARS BASED ON A PROSPECTIVE DIABETES MODEL IN THE PROVINCE OF STYRIA, AUSTRIA

Habacher W[1], Palmer AJ[2], Pieber TR[1], Rakovac I[1], Fritz C[1], Gfrerer R[1], Roze S[2]
[1]Joanneum Research, Graz, Austria; [2]CORE Center for Outcomes Research, Binningen/Basel, Switzerland

OBJECTIVES: In the province of Styria, Austria, a structured patient education program for patients with type-2 diabetes was established in the year 2000. In this open label, prospective cohort study (n = 1150) follow-up data after one year have been analysed to document the potential effects over 10 years using the CORE-Diabetes Model, a validated, peer reviewed simulation model. Patients outcomes and total costs were calculated. **METHODS:** A Styria-wide patient education program for type-2 diabetes was established for general practitioners to improve treatment outcomes in diabetes care. The program is funded by the public health care system and a standardised documentation at baseline and after one year was used. Intermediate results after one year were incorporated in the CORE diabetes model and linked with Austria specific cost data. Monte-Carlo-Simulation (n = 5.000) over ten years projected long term effects of single patient education. A virtual control group was assumed to be treated like general Styrian diabetic population. Discount rate was 5 % annually. **RESULTS:** The average life expectancy increased by 0.29 years (7.32 ± 3.48 vs. 7.03 ± 3.5) under education, the total costs over ten years decreased by 774€ per patient (20,496€ ± 30,335€ vs. 21,270€ ± 37,917€) or 3.8%. Patient education leads to improved foot care and retinal screen-