lowing three criteria: 1) diagnosis of diabetes mellitus; 2) prescription of oral anti-diabetic drug; and 3) fasting blood or plasma glucose value indicative of diabetes. The average length of follow-up upon inclusion was 4.5 years. **METHODS:** Costs of inpatient care were estimated by classifying hospitalisations of study patients into diagnosis-related groups (DRGs) according to the Nord-DRG classification system and assigning average costs per DRG (2002 prices) according to a national list relying on individual patient level costs incurred at Swedish hospitals applying the Nord-DRG system. Costs of outpatient care were estimated by assigning unit costs of outpatient care-giver contacts obtained from published sources to data on study patients' care-giver contacts as recorded in medical records at participating primary care centres. **RESULTS:** The average annual cost of inpatient care over the studied years was €1088 per patient (SD €4460; n = 9292 on average). Between 2000 and 2004, an annual increase in costs of between 9% and 15% was observed (constant prices). The average annual cost of outpatient care during the studied years was €363 per patient (SD €437) with little variation over the years. GP visits accounted for 40% of outpatient costs, the average patient making 1.7 GP visits per year. **CONCLUSIONS:** Diabetes continues to impose a heavy economic burden on society. Cost estimates from this population-based sample of Swedish diabetic patients may serve as reference values for a Swedish setting.

PDB26

COST-EFFECTIVENESS OF ROSIGLITAZONE FOR TREATMENT OF TYPE 2 DIABETES IN PORTUGAL USING DIFFERENT METHODS TO MODEL CLINICAL EFFECTS

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OBJECTIVES: The RESULT study demonstrated that sulphonylurea (SU) plus rosiglitazone (RSG) provided a sustained and substantial increase in beta-cell function (BCF) from baseline (56%, p < 0.0001) compared to SU alone (6%, p = 0.41). This modelling study explores the impact on disease progression, health outcomes and health care expenditure in Portugal of different approaches to modelling RSG's effect on BCF. **METHODS:** DiDACT, a peer-reviewed published long-term model of T2DM, was used to replicate patient characteristics (73% Male, mean age 68.2 years, mean BMI 30 kg/m2) and the impact of SU + RSG on BCF observed in the RESULT study using an additive, a multiplicative or combined approach. Disease progression for 1000 hypothetical patients, projected total lifetime health care costs and health gains, measured in time to insulin and quality-adjusted life years (QALYs) were predicted. Following failure of intermediate SU dose to maintain glycaemic target, up-titrated SU therapy was compared to SU + RSG combination. The treatment change threshold was HbA1C ≥ 7.5%. Resources were valued using national unit costs from a variety of sources. Costs and outcomes were discounted at 5% per year. **RESULTS:** Both revised calibrations yielded lower lifetime health care costs and additional QALYs, compared to the original calibration. Compared with SU alone both revised calibrations resulted in lower incremental cost-effectiveness ratios (ICERs). Each representation of RSG showed greater time to insulin than SU alone (13 years); the additive approach substantially extended viability of oral therapy to 27.5 years compared to 20 years for multiplicative and original calibrations. **CONCLUSIONS:** Each

modelling approach resulted in reduced costs, increased QALYs and time to insulin when compared with the original calibration. The use of RSG in the management of T2DM appears to be cost-effective in all scenarios investigated. Forthcoming long-term studies of RSG may confirm the impact of RSG on BCF observed and enable determination of the most appropriate method for model calibration.

PDB27

A COST-UTILITY ANALYSIS OF ORLISTAT (XENICAL®) IN THE TREATMENT OF DIABETIC PATIENTS WITH MORBID OBESITY AND ADDITIONAL CVD RISK IN NORWAY

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OBJECTIVES: The co-epidemics of obesity and type II diabetes and associated complications result in an increasing population with high risk of serious morbidity, mortality and reduced quality of life. This analysis has been specifically developed to estimate the cost per quality adjusted life year (QALY) gained with orlistat compared to standard clinical practice (SCP) in a particularly high-risk diabetic population with morbid obesity (BMI > 35 kg/m2 and at least one additional CVD risk). In Norway this is a population with clearly unmet needs for preventive medical interventions. **METHODS:** The incremental cost-utility is calculated in an Excel-model comparing 1 year of orlistat treatment followed by 9 years of SCP with 10 years of SCP. The baseline risk is based on the findings of the UK Preventive Diabetes Study (UKPDS), adjusted for differences in BMI. The effects of orlistat and SCP (conservatively assumed equal to placebo + SCP) on risk factors (BMI, HbA1c, LDL-cholesterol, SBP), are based on results from the relevant randomized clinical trials. 3 years catch-up of risks after termination of orlistat is assumed. UKPDS and the Heart Protection Study provide assessments of the change in risk associated with change in HbA1c and the other relevant risk factors. Effects on utility are based on the results from CODE-2. Direct costs related to the treatment alternatives and their associated complications are included from a Norwegian societal perspective. **RESULTS:** The expected incremental cost of treating high-risk Norwegian diabetic morbid obese patients with orlistat is approximately €3125/QALY. Extensive one- and multiway sensitivity analyses using Monte Carlo simulation indicate robustness of the results. **CONCLUSIONS:** The results of this model indicate that one year treatment with orlistat is a highly cost-effective alternative to SCP for diabetic patients with morbid obesity and additional CVD risk in Norway.

PDB28

INADEQUATE GLYCEMIC CONTROL: IS IT RELATED WITH MORE COMORBIDITIES AND MORE RESOURCE UTILIZATION?

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OBJECTIVE: To evaluate the influence of inadequate glycemic control (IC) in comorbidity and health resource utilization of type 2 diabetic patients treated in a general practitioner setting. **METHODS:** Retrospective observational study (systematic-sampling) of patients older than 18 years, treated in 5 primary care centres during 2005. The following parameters were evaluated: IC, defined by HbA1c > 7%; age; sex; comorbidities (hypertension, hypercholesterolemia, smoking, obesity, ischemic-heart-disease, cardiovascular event (CVE), COPD, depression, cardiac-renal-hepatic insufficiency, microvascular complications); clinical parameters (BMI, total-cholesterol, LDL-Friede-