patients with HDL-c <1 mmol/L, treatment with statin plus add-on Niaspan® was compared to statin monotherapy. Niaspan® treatment effects were taken from several clinical trials as summarized in the European SPC. The second model (Markov) simulated the development of coronary heart disease events based on the Framingham risk formulae. Direct medical costs were accounted from a third-party payer perspective in the UK and expressed in pounds sterling (£). Annual discount rates of 3.5% were applied to clinical and cost outcomes. **RESULTS:** Niaspan® was associated with improvements in mean discounted life expectancy in diabetic (0.32 years) and non-diabetic cohorts (0.29 years) compared to statin monotherapy. Similarly, improvements in quality-adjusted life expectancy of (diabetic) 0.26 and (non-diabetic) 0.23 quality-adjusted life years (QALYs) were projected. Niaspan® was associated with increases in mean lifetime costs of £4492 (diabetic) and £4891 (non-diabetic) versus statin alone. This led to incremental cost-effectiveness ratios of £17,296 per QALY gained in the diabetic cohort and £21,150 in the non-diabetic cohort. **CONCLUSIONS:** Addition of Niaspan® to statin treatment was cost-effective by generally accepted standards compared to statin monotherapy in patients with persistently low HDL-c in the UK. In patients with Type-2 diabetes and an associated high risk of CHD events, add-on therapy with Niaspan® represented better value for money than in non-diabetic patients.

PDB19

ECONOMIC EVALUATION OF SWITCHING TYPE-1 DIABETES PATIENTS FROM LONG-ACTING INSULIN GLARGINE IN A BASAL/BOLUS REGIMEN TO LONG-ACTING INSULIN DETEMIR IN AN AUSTRIAN SETTING

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OBJECTIVES: To project the long-term clinical and cost outcomes associated with long-acting insulin analog treatment in patients with type-1 diabetes in an Austrian setting. **METHODS:** We used a published, validated and peer-reviewed computer simulation model of diabetes to project short-term clinical findings to evaluate long-term outcomes including quality-adjusted life expectancy, complication rates and direct medical costs. Clinical data have been derived from the PREDICTIVE study, an ongoing global post-marketing safety study, for a sub-group of patients with type-1 diabetes receiving long-acting insulin glargine (IGlar) in a basal/bolus treatment regimen at baseline and switched to long-acting insulin detemir (IDet). After 12 weeks of follow up, IDet-based basal/bolus treatment was associated with improvements in HbA1c (0.25%-points lower), reduced risk of hypoglycemic events (by 55%), and decreased body weight (0.27 kg) compared to IGlar-based treatment. Probabilities of complications and HbA1c-dependent adjustments were derived from the DCCT, Framingham, and WESDR studies (amongst others). Costs of treating complications were retrieved from published sources. Total direct costs (complications + treatment costs) were projected over patient lifetimes. Costs and outcomes were discounted at 3.5% per annum. **RESULTS:** Improved glycemic control, decreased hypoglycemic events and BMI with IDet-based basal/bolus therapy led to fewer diabetes-related complications and an increase in quality-adjusted life expectancy of 0.13 quality-adjusted life years (QALYs). IDet-based therapy was associated with slightly higher lifetime direct costs (€394 per patient) which led to an incremental cost-effectiveness ratio (ICER) of €3031 per QALY gained. **CONCLUSIONS:** Short-term clinical benefits associated with IDet-based basal/bolus therapy were projected to lead to improvements in quality-adjusted life expectancy and fewer diabetes related complications than IGlar-based regimens. Incremental cost-effectiveness analysis indicated that, over patient lifetimes, IDet-based combinations would represent good value for money versus IGlar-based therapy in the Austrian setting.

PDB20

BIPHASIC INSULIN ASPART 30 VERSUS ORAL HYPOGLYCEMIC AGENTS IN THE TREATMENT OF TYPE-2 DIABETES: LONG-TERM PROJECTION OF CLINICAL AND COST OUTCOMES IN SWEDEN

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OBJECTIVES: To project long-term clinical and cost outcomes associated with biphasic insulin aspart 30 (BIAsp 30) and oral hypoglycemic agents (OHAs) in a Swedish setting based on the findings of a randomized clinical trial. **METHODS:** A published, validated and peer-reviewed model of diabetes was used to simulate the progression of diabetes-related complications based on clinical trial data which showed that switching to BIAsp 30 significantly reduced HbA1c compared to continuation of OHAs in insulin-naïve patients with Type-2 diabetes over 16 weeks (difference in HbA1c reduction 0.648%; $p < 0.001$). Direct medical costs were accounted from a third party payer perspective in Sweden and expressed in 2004 Swedish Kroner (SEK). Costs and clinical benefits were discounted at 3% annually and sensitivity analyses were performed on treatment effect, time horizon and discount rates. **RESULTS:** BIAsp 30 was projected to extend life expectancy (mean [standard deviation]) by 0.47 [0.22] compared to OHAs (11.38 vs. 10.90 years). Quality-adjusted life expectancy was improved with BIAsp 30 by 0.42 [0.15] quality-adjusted life years (QALYs) versus OHAs (7.94 vs. 7.52 QALYs). BIAsp 30 was associated with a lower cumulative incidence of diabetes-related complications, particularly retinopathy and nephropathy. Mean direct lifetime costs were higher in the BIAsp 30 group (SEK 286,467 [11,745]) than in patients receiving OHAs (SEK 272,752 [12,885]), a difference of SEK 13,716 [17,030], leading to an incremental cost-effectiveness ratio of SEK 32,736 per QALY gained. Sensitivity analysis showed that these findings were robust under variation in a range of assumptions. **CONCLUSIONS:** Switching to BIAsp 30 was projected to reduce the incidence of diabetes-related complications, and improve life expectancy and quality-adjusted life expectancy, compared to continuation of OHAs in Type-2 diabetes patients. Switching to BIAsp 30 was projected to represent good value for money by internationally accepted standards in the Swedish setting.

PDB21

COST-EFFECTIVENESS ANALYSIS OF BASAL/BOLUS THERAPY IN TYPE-1 DIABETES USING INSULIN DETEMIR + INSULIN ASPART OR HUMAN SOLUBLE INSULIN-BASED BASAL/BOLUS REGIMENS IN GERMANY

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OBJECTIVES: In patients with type-1 diabetes, poor glycemic control is associated with an increased risk of complications. A recent clinical study provided evidence that basal/bolus treatment with insulin detemir + insulin aspart (IDet/IAsp) improved HbA1c (0.22%-points lower after 18 weeks), reduced the risk of hypoglycemic events (by 21%), and decreased body mass index