and cardiovascular disease amongst others. Treatment effects and cohort characteristics (mean age 63.1 years, diabetes duration 12.8 years, HbA1c 8.17%, BMI 30.3 kg/m^2) were based on the German cohort of the PREDICTIVE (Predictable Results and Experience in Diabetes through Intensification and Control to Target: an International Variability Evaluation) study. Direct medical costs were derived from published sources and expressed in 2006 Euro (€) values. Projections were made over a 35-year time horizon. Future costs and clinical benefits were discounted at 3.5% annually. Sensitivity analyses were performed. **RESULTS:** Treatment with IAsp was projected to improve quality-adjusted life expectancy by approximately 0.10 quality-adjusted life years (QALYs) (6.06 ± 0.09 versus 5.96 ± 0.09 QALYs). Increased treatment costs with IAsp were partially offset by cost savings due to reductions in the cumulative incidence of diabetes-related complications. Over patient lifetimes, mean direct medical costs were projected to increase by approximately €1,274 per patient with IAsp versus HSI (€45,423 ± 1,354 versus €44,149 ± 1,391). This resulted in an incremental cost-utility ratio of €13,305 per QALY gained. **CONCLUSION:** Over patient lifetimes, IAsp treatment was projected to result in fewer diabetes-related complications and improved quality-adjusted life expectancy compared to HSI. Based on currently accepted willingness-to-pay limits, IAsp would represent good value for money in the German setting.

ED3

DIFFERENCES IN HEALTH RELATED RESOURCE USE IN THE 6 MONTHS PRIOR TO AND AFTER INSULIN INITIATION IN PATIENTS WITH TYPE 2 DIABETES IN GERMANY AND UNITED KINGDOM: DATA FROM THE INSTIGATE STUDY

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OBJECTIVES: An objective of the INSTIGATE study is to describe the resource utilisation associated with care for type 2 diabetes in the 6 months before and after insulin initiation. This abstract presents data from patients enrolled in Germany and UK. **METHODS:** INSTIGATE is an ongoing prospective European observational study investigating patients with type 2 diabetes who have initiated insulin during usual care. Data on resource use for diabetes was collected at baseline retrospectively for the 6 months prior to initiating insulin and at 3 and 6 months following insulin initiation. **RESULTS:** In all, 509 patients were enrolled in Germany and UK. 6 month follow-up data was collected from 457 patients. The following changes in health care professional consultations were observed in the 6 months before and after insulin initiation: The % of patients with a visit to a primary care doctor declined from 93.4% to 83.7% in Germany, and in the UK from 79.4% to 48.2%. Visits to specialist nurses increased in Germany from 52.3% to 91.4%, and in the UK from 77.5% to 81.7 % of patients. In both countries the % of patients having phone calls with a specialist nurse increased; from 11.7% to 50.6% in Germany and from 21.3% to 75.9% in UK. The % of patients using a blood glucose monitor and the median weekly number of test strips used increased in both countries, most notably in Germany from 76.6% of patients testing 4 times a week before insulin initiation to 99.6% of patients testing 21 times per week 6 months after insulin initiation. **CONCLUSION:** The type of health care professionals visited and nature of the consultations changed in both countries following insulin initiation; the % of patients having visits to primary care providers decreased and the % of patients having visits and phone calls to specialist nurses increased.

ED4

THE RELATIVE COST EFFECTIVENESS OF SWITCHING TO INSULIN GLARGINE VERSUS NPH INSULIN IN INSULIN NAIVE AND NON INSULIN NAIVE TYPE 2 DIABETES PATIENTS USING UK REAL LIFE DATA

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OBJECTIVES: This study, conducted in Type 2 diabetes mellitus (T2DM), evaluated the cost utility of glargine versus NPH in previously insulin naïve (IN) and non insulin naïve (NIN) patients switching from NPH to insulin glargine in the UK using observational data. The study assessed the combined effect of HbA1c and hypoglycaemia reduction. **METHODS:** A discrete event life time simulation based on UKPDS 68 was adapted to include the effects of HbA1c and hypoglycaemia reduction using published meta-regression results from 11 randomised clinical trials. Direct costs and health utility (EQ5D) were derived from published sources and the HODaR database respectively; costs and benefits were discounted at 3.5%. This model used the demographic and efficacy profiles of T2DM patients who were IN or NIN who switched from NPH to glargine identified via the THIN database. Analysis was conducted on 1,496 and 174 IN and NIN patients respectively; the primary outcome measure was Hba1c change. As hypoglycaemia was not directly collected from the THIN database, sensitivity analysis was performed taking into account HbA1c benefit only. **RESULTS:** The mean age and duration of diabetes at switch was 63 years and 7.5 years (IN) and 70 years and 10.2 years (NIN) respectively. After adjustment for baseline profiles IN patients starting glargine showed a significant reduction in HbA1c of 0.21% ($p = 0.029$) 12 months post initiation versus NPH. For NIN patients switching from NPH to glargine the adjusted HbA1c reduction was 0.46% ($p = 0.0093$). The cost per QALY for a simulated cohort of 10,000 patients was £5,806 and £3,415 for IN and NIN patients. In sensitivity analysis considering an HbA1c reduction only the cost per QALY was £18,179 and £7,973 for IN and NIN patients respectively. **CONCLUSION:** Based on real life observational data, in both IN and NIN patients T2DM patients, glargine is cost-effective compared to NPH.

PODIUM SESSION I: METHODS & CONCEPTS

MC1

ASSESSING THE GENERALISABILITY OF COST EVALUATION RESULTS USING THE EUCLIDEAN METRIC AND PRINCIPAL COMPONENTS ANALYSIS: LESSON FROM A HIGH-COST INNOVATION IN ONCOLOGY

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OBJECTIVES: This study tested a method to measure the variability of data among countries, and to assess the generalisability of cost evaluation results. **METHODS:** The first step of the method consisted in identifying, within cost evaluations, all the factors potentially responsible for variability among locations. The second step consisted in selecting, among all potential transferability factors, the final transferability factors which generated variability, impacted on outcomes of economic evaluation, and were both measurable and distinguishable from other factors. The third step was the identification of transferability areas as sets of homogeneous final transferability factors. Both the Euclidean metric and Principal Components Analysis were used in the fourth step to explore the generalisability of the results.