per patient was R$27,359 (€9,877) for octreotide LAR and R$46,287 (€$16,710) for lanreotide SR. Net savings per patient per year with octreotide LAR were R$18,928 (€6,833). Sensitivity analysis did not revert results of net savings. **CONCLUSIONS:** Monitoring of acromegaly treatment costs after reimbursement for somatostatin analogues showed that octreotide LAR is cost-saving compared to lanreotide SR in Brazil under the Public Health Care System perspective.

PDB35

COST-UTILITY ANALYSIS OF BIPHASIC INSULIN ASPART VERSUS HUMAN INSULIN IN TYPE 2 DIABETES MELLITUS PATIENTS TREATED IN TIER III HOSPITALS IN BEIJING, CHINA: A LONG TERM OUTCOMES MODEL EVALUATION FROM THE IMPROVE OBSERVATIONAL STUDY

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OBJECTIVES: The objective of this study was to estimate cost-utility of biphasic insulin aspart (BIAsp) versus biphasic human insulin (BHI) in type 2 diabetes patient's diagnosed and treated in tier III urban hospitals in China. **METHODS:** A published, validated, peer-reviewed computer simulation model of diabetes (the CORE Diabetes Model) was used to project short-term results obtained from a large, 26-week, observational study conducted across China. 474 Chinese patients were switched from BHI to BIAsp and results were entered into the model. Complication cost data and a survey of treatment management practices were collected from secondary care centres independent of the observational study, to avoid protocol costs. Market prices of drugs and glucose monitoring tests were used. Patient baseline characteristics included the mean age (57.9 years), duration of diabetes (7.98 years) and baseline HbA1c (8.55%). Life expectancy, quality adjusted life expectancy and total direct medical costs (complications + treatment costs) were projected over patient lifetimes (30 years), and were discounted at 3% per annum in line with local pharmacoeconomic guidelines. **RESULTS:** Improved glycemic control and lower hypoglycemic event rates associated with BIAsp therapy led to an increase in life expectancy (mean ± sd) of 0.261 years (10.72 ± 0.174 versus 10.46 ± 0.163) compared to BHI. Quality-adjusted life expectancy increased by 0.53 years (6.94 ± 0.115 versus 6.39 ± 0.10). BIAsp was associated with increased total lifetime costs per patient of CNY 2,386 (247,325 ± 5,897 versus 244,939 ± 6,922). Thus, BIAsp is associated with an incremental cost-effectiveness ratio (ICER) of CNY 4315 per quality-adjusted life year (QALYs) gained. Probabilistic sensitivity analysis shows that the result is robust. **CONCLUSIONS:** Long term (life time) projections of the short-term clinical improvements from the Chinese IMPROVE study suggest that BIAsp is a cost-effective treatment compared to BHI, with an ICER below what would be considered cost-effective in China, using cost-effectiveness thresholds of 2–3 times GDP per capita, suggested by the WHO.

PDB36

COST-EFFECTIVENESS OF THE ROUX-EN-Y GASTRIC BYPASS SURGERY COMPARED WITH MEDICAL MANAGEMENT FOR TREATMENT OF TYPE 2 DIABETES MELLITUS (T2DM) PATIENTS IN THE USA

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OBJECTIVES: Type 2 Diabetes mellitus (T2DM) is a frequent comorbid condition with obesity. The increasing prevalence of obesity in the USA, coupled with the rising prevalence of T2DM and the high up-front cost of bariatric surgery, has necessitated payers to question the cost-effectiveness of bariatric surgery as a treatment for T2DM. Our analyses compared cost-effectiveness of the Roux-En-Y gastric bypass surgery with medical management for T2DM patients using clinical outcomes data from a bariatric surgery practice at the University of Minnesota and modeling these 2-year observational follow-up data to a lifetime horizon. **METHODS:** The CORE Diabetes Model was used to project lifetime clinical and economic outcomes for T2DM patients undergoing bariatric surgery. The baseline mean HbA_{1c} (7.7%), age (50.7), body mass index (48.8 kg/m^2), gender (22% male), race/ethnicity, and risk factors were taken the University of Minnesota cohort (n = 169). Remaining cohort characteristics, transition probabilities, utilities, direct treatment, and complication costs were obtained from published sources. All costs and clinical outcomes were discounted at 3% per annum. **RESULTS:** Average lifetime total direct costs per patient were $96,696 (±3,349) for Roux-En-Y gastric bypass and $77,169 (±2,674) for medical management. Discounted life expectancy and quality-adjusted life years (QALYs) increased by 0.578 (±0.470) years and 0.827 (±0.501) QALYs, respectively, for Roux-En-Y gastric bypass compared with medical management. The resulting incremental cost-effectiveness ratios (ICERs) for Roux-En-Y gastric bypass compared with medical management were $33,795/life-year gained and $23,618/QALY gained. Probabilistic sensitivity analysis demonstrated a 79.3% likelihood of the cost/QALY being ≤$50,000/QALY for Roux-En-Y gastric bypass compared with medical management. **CONCLUSIONS:** Cost-effectiveness was driven primarily by superior HbA_{1c}, lipid reductions, and weight loss. The ICERs obtained in our analyses provide evidence for the long-term cost-effectiveness of Roux-En-Y gastric bypass as a treatment for T2DM and is consistent with current threshold values in the USA for health technology assessment.

PDB37

IS INSULIN GLARGINE A COST-EFFECTIVE OPTION FOR TREATMENT OF PATIENTS NAÏVE TO INSULIN TREATMENT WITH TYPE 2, BASELINE HBA1C ABOVE 8% AND AGE BELOW 65 YEARS IN COMPARISON TO NPH AND PREMIX IN POLAND?

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OBJECTIVES: The aim of the study was to evaluate the cost-utility of insulin glargine versus NPH and premix in patients with DM2 with baseline HbA1c above 8% and age below 65 years in Poland. **METHODS:** The method adapted was a cost utility analysis with a 40 year time horizon and public payer perspective. The model used is a DES model based on the UKPDS 68 equations which has the ability to assess the economic impact and health consequences outlined as the development of co-morbidities of a reduction in hypoglycemia, an improvement in glycaemia or both of these at the same time. A cohort of 1000 patients was generated in the model. Glycaemic control has been incorporated into the model using results from The Health Improvement Network (THIN) database. Polish costs were applied in the model and only direct medical costs were considered in the analysis. Sensitivity analysis was performed. The study was conducted according to the Polish HTA guidelines. In the analysis patients were divided into three groups by age and baseline HbA1c level. **RESULTS:** When comparing glargine to NPH the analyses showed that for patients with age <= 65 and