baseline HbA1c $\geq 8\%$, the cost per QALY was estimated at 52,554PLN; for patients with age $< 55$ and baseline HbA1c $= 9\%$ at 50,139 PLN and for patients with age $< 45$ and baseline HbA1c $= 10\%$ at 32,689PLN. In the same patient groups in the analysis for insulin glargine vs pre mix costs per QALY were estimated at 47,171PLN; 40,055PLN; 23,980PLN respectively. CONCLUSIONS: The analysis showed that glargine compared to NPH and premix is a cost effective option for treatment of type 2 diabetes in Poland in patients with baseline HbA1c above 8% and age below 65 years. The results of the cost utility analysis are well below the cost—effectiveness threshold in Poland (equals to 83,239 PLN/QALY).

**PDB38**

**THE COST-EFFECTIVENESS OF GROWTH HORMONE REPLACEMENT THERAPY WITH GENOTROPIN® IN HYPOPITUITARY ADULT PATIENTS**

Bolin K1, Jonsson B2, Kołtowska-Hagstrom M1, Prutz C2, Sandin R1
1Lund University, Lund, Sweden, 2Uppsala University, Uppsala, Sweden, 3Pfizer Endocrine Care, Sollentuna, Sweden, 4Pfizer AB, Sollentuna, Sweden

**OBJECTIVES:** To calculate cost-effectiveness ratios [incremental cost per quality-adjusted-life-year (QALY) gained] for somatropin (Genotropin®) treatment of adult patients with growth hormone deficiency (GHD) due to non-functioning pituitary adenoma compared to no growth hormone replacement treatment. **METHODS:** A Markov-type cost-utility simulation model was constructed and used in order to simulate, for a male and female cohort, morbidity and mortality for treated and not treated individuals over a 20-year time horizon. The calculations were performed using 2003 prices concerning morbidity-related health care costs, and up-to-date unit cost for Genotropin®. Costs are expressed in SEK (1 Euro $= 9.5$ SEK). All costs and effects are discounted at three percent. The total of 550 treated Swedish patients from the KIMS database (Pfizer International Metabolic Database) was used in the calculations. **RESULTS:** The results are presented as incremental cost per QALY gained including both direct and indirect effects and costs. The weighted sum of all sub-group incremental cost-effectiveness ratios (excluding indirect effects of morbidity) were SEK141,630 ($\equiv 14,911$) and SEK206,028 ($\equiv 21,687$) for men and women, respectively. Including also indirect mortality effects resulted in lower weighted cost-utility ratios: SEK131,474 ($\equiv 13,839$) and SEK150,766 ($\equiv 15,870$) for men and women, respectively. Key drivers of the results are changes in quality of life, increased survival and treatment cost. **CONCLUSIONS:** The results show that the overall cost per QALY is moderate if compared to informal thresholds applied in Sweden. Our simulations suggest that at the SEK500,000 ($\equiv 52,632$)/QALY-threshold, treatment with Genotropin® has a 100% probability of being cost-effective for men and at least 90% for women.

**PDB40**

**COST-UTILITY OF INSULIN GLARGINE COMPARED TO NPH IN TYPE 2 DM1 FROM A PUBLIC PAYER PERSPECTIVE IN POLAND**

McEwan P1, Woehl A1, Kawalec P1, Lis J1, Gierczynski J1, Walczak J1
1Cardiff University, Cardiff, UK, 2Centrum HTA, Krakow, Poland, 3Sanofi-Aventis sp. z o.o, Warszawa, Poland, 4Arcana Institute, Cracow, Poland

**OBJECTIVES:** The aim of the study was to evaluate the relative cost-utility of Insulin glargine versus NPH in people with type 1 diabetes applied in a Polish setting. **METHODS:** The method adapted was a cost-utility analysis with a 40 year time horizon. The model used in this evaluation is a Discrete Event Simulation (DES) model primarily based on the DCCT study 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. The time increment applied is in yearly increments and the model was designated to simulate a cohort of 1000 patients. Hypoglycaemia rates and rate reductions were drawn from peer-reviewed publications. Glycaemic control has been incorporated into the model using results from the THIN database. Polish costs were applied in the model and only direct medical costs were considered in the analysis. The analysis was conducted according to HTA guidelines in Poland and included also sensitivity analysis. **RESULTS:** When comparing insulin glargine to NPH the analyses showed that the in patients with baseline HbA1c $= 10\%$, HbA1c $\geq 9\%$, HbA1c $= 8\%$ the cost per QALY for insulin glargine vs NPH was estimated at 34,810 PLN; 26,197PLN; 38,110PLN respectively. In the same subgroups analysis for glargine vs premix in patients with baseline HbA1c $= 10\%$, HbA1c $\geq 9\%$, HbA1c $= 8\%$ cost per QALY was estimated at 33,090PLN; 29,004PLN; 47,661PLN. **CONCLUSIONS:** The analysis showed that glargine compared to NPH and premix is a cost-effective option for treatment of type 1 diabetes in Poland in patients with baseline HbA1c above 8%. The outcomes of the cost-utility analysis are well below the cost-effectiveness threshold in Poland (equals to 83,239 PLN/QALY).

**PDB39**

**IS INSULIN GLARGINE A COST EFFECTIVE OPTION IN TREATMENT OF PATIENTS WITH TYPE DM1 WITH BASELINE HBA1C ABOVE 8% IN COMPARISON TO NPH AND PREMIX IN POLAND?**

McEwan P1, Woehl A1, Kawalec P1, Lis J1, Gierczynski J1, Walczak J1
1Cardiff University, Cardiff, UK, 2Centrum HTA, Krakow, Poland, 3Sanofi-Aventis sp. z o.o, Warszawa, Poland, 4Arcana Institute, Cracow, Poland

**OBJECTIVES:** The goal of the study was to evaluate the cost-utility of Insulin glargine versus NPH and premix in patients with type 1 diabetes mellitus with baseline HbA1c above 8%, applied in a Polish setting. **METHODS:** The method adapted was a cost-utility analysis with a 40 year time horizon. The model used in this evaluation is a Discrete Event Simulation (DES) model primarily based on the DCCT study 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. The time increment applied is in yearly increments and the model was designated to simulate a cohort of 1000 patients. Hypoglycaemia rates and rate reductions were drawn from peer-reviewed publications. Glycaemic control has been incorporated into the model using results from the THIN database. Polish costs were applied in the model and only direct medical costs were considered in the analysis. The analysis was conducted according to HTA guidelines in Poland and included also sensitivity analysis. **RESULTS:** When comparing insulin glargine to NPH the analyses showed that the in patients with baseline HbA1c $= 10\%$, HbA1c $\geq 9\%$, HbA1c $= 8\%$ the cost per QALY for insulin glargine vs NPH was estimated at 34,810 PLN; 26,197PLN; 38,110PLN respectively. In the same subgroups analysis for glargine vs premix in patients with baseline HbA1c $= 10\%$, HbA1c $\geq 9\%$, HbA1c $= 8\%$ cost per QALY was estimated at 33,090PLN; 29,004PLN; 47,661PLN. **CONCLUSIONS:** The analysis showed that glargine compared to NPH and premix is a cost-effective option for treatment of type 1 diabetes in Poland in patients with baseline HbA1c above 8%. The outcomes of the cost-utility analysis are well below the cost-effectiveness threshold in Poland (equals to 83,239 PLN/QALY).