baseline HbA1c $\geq 8\%$ the cost per QALY was estimated at 52,554PLN; for patients with age $\leq 55$ and baseline HbA1c $\geq 9\%$ 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).

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

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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 mortality) were SEK141,650 (€14,911) and SEK206,028 (€21,687) for men and women, respectively. Including also indirect mortality effects resulted in lower weighted cost-effectiveness ratios: SEK131,474 (€13,839) and SEK150,766 (€15,870) for men and women, respectively. Key drivers of the results are improvements in quality of life, increased survival and treatment cost.

CONCLUSIONS: The results showed that glargine compared to NPH the analyses showed that the in patients with baseline HbA1c $\geq 10\%$, HbA1c $\geq 9\%$, HbA1c $>10\%$ 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 $\geq 10\%$, HbA1c $\geq 9\%$, HbA1c $>8\%$ cost per QALY was estimated at 33,000PLN; 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).

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

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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 Health Improvement Network (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 $\geq 10\%$, HbA1c $\geq 9\%$, HbA1c $>10\%$ 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 $\geq 10\%$, HbA1c $\geq 9\%$, HbA1c $>8\%$ cost per QALY was estimated at 33,000PLN; 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).

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?

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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 Health Improvement Network (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 $\geq 10\%$, HbA1c $\geq 9\%$, HbA1c $>10\%$ 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 $\geq 10\%$, HbA1c $\geq 9\%$, HbA1c $>8\%$ cost per QALY was estimated at 33,000PLN; 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).
represents good value for money. Using the cost-effectiveness threshold in Poland (equals to 83,239 PLN/QAL Y) insulin glargine should be regarded as a cost-effective option for treatment of patients with type 1 diabetes in Poland.

PDB41

COST-EFFECTIVENESS OF SOMATROPIN (NORDITROPIN®) FOR THE TREATMENT OF GROWTH HORMONE DEFICIENT (GHD) CHILDREN IN A UK SETTING

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OBJECTIVES: Reduced health-related quality of life (HRQoL) is a pronounced complication in short individuals with Growth Hormone Deficiency (GHD). Treatment options for GHD children are limited; however, somatropin therapy has been shown to normalise height in childhood and adolescence compared with no treatment. The aim of this study was to establish whether somatropin is a cost-effective treatment for GHD children compared with no treatment. METHODS: A cost-effectiveness model estimated the costs and health benefits over the lifetime of GHD children. A UK National Health Service (NHS) perspective was used. Unit costs (GBP; 2008) were obtained from relevant UK sources. A 3.5% discount rate was used. Clinical data (height, dosing and treatment duration) were obtained from a systematic literature review (only studies with n > 300). Height standard deviation scores (HSDS) were used for comparable height estimates. Utility data was derived from a published UK-based study linking HRQoL and HSDS. Several sensitivity analyses were conducted. RESULTS: Start HSDS was −2.8 (SD 0.8) and final HSDS was −1.5 (SD 0.8) with somatropin treatment. Untreated children had no HSDS gain. The mean dose was 0.023 mg/kg/day over 5.1 years duration (SD 1.8). Over a patient’s lifetime, somatropin was associated with a gain of 2.0 additional quality adjusted life years (QALYs) at an incremental cost of £50,931 compared with no treatment. As a result, somatropin was associated with an incremental cost per QALY of £25,447 compared with no treatment. CONCLUSIONS: The results showed that glargine compared to premix represents good value for money. Using the cost-effectiveness threshold in Poland (which is equal to 83,239 PLN/QAL Y) insulin glargine should be regarded as a cost-effective option for treatment of patients with type 2 diabetes in Poland.

PDB42

COST-UTILITY OF INSULIN GLARGINE COMPARED TO PREMIX IN TYPE 2 FROM PUBLIC PAYER PERSPECTIVE IN POLAND

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OBJECTIVES: The aim of the study was to evaluate the cost-utility of Insulin glargine versus premix in insulin naive and non insulin naive patients with type 2 diabetes applied in a Polish setting. METHODS: Cost-utility analysis from public payer perspective was conducted with a 40 years time horizon. The model used in this evaluation is a DES model 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. Hypoglycemia rates and rate reductions were drawn from peer-reviewed publications. Glycaemia 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. RESULTS: When comparing insulin glargine to premix (using base case results for background hypoglycemia events) the analyses showed that the cost per QALY was estimated at 57,678 PLN for insulin naive patients and 44,244 PLN for non-insulin naive patients. The total estimated discounted costs over a lifetime for insulin naive patients were for glargine 23,158,693 PLN and for premix 16,307,845 PLN, total estimated discounted QALYs were for glargine 6,121 and for premix 6,002. In non-insulin naive patients costs were for glargine 26,871,051 PLN and for premix 18,813,440 PLN and QALYs were 9,855 and 9,747 for insulin glargine and premix respectively. CONCLUSIONS: The results showed that glargine compared to premix represents good value for money. Using the cost-effectiveness threshold in Poland (which is equal to 83,239 PLN/QAL Y) insulin glargine should be regarded as a cost-effective option for treatment of patients with type 2 diabetes in Poland.

PDB43

ADDING INSULIN GLARGINE TO ORAL THERAPY IN PATIENTS WITH TYPE 2 DIABETES RESULTS IN LONGER PERSISTENCE WITH TREATMENT COMPARED TO NPH INSULIN

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OBJECTIVES: To compare the persistence with insulin Glargine (BOT = basal supported oral treatment) to those with NPH if added to oral antidiabetics. METHODS: A retrospective cohort study was conducted utilizing a representative real-life database IMS® Disease Analyzer. Patients with type 2 diabetes beginning insulin therapy with Glargine or NPH during the period 01/2003 to 08/2006 and being continuously eligible for at least 12 months after the treatment initiation were included. Follow-up was 12–57 months corresponding to the documentation length. Persistence was measured as time until switch to intensified insulin therapy (ICT). RESULTS: In total 1,242 patients were included, of whom 896 were treated with Glargine and 346 with NPH. No correlation was found for gender, insurance status, region, physician group were significantly correlated with the persistence. Background hypoglycemia events) the analyses showed that the cost per QALY was estimated at 57,678 PLN for insulin naive patients and 44,244 PLN for non-insulin naive patients.