were extrapolated to The Netherlands by direct standardisation. **RESULTS:** From 2000 to 2004, the annual prevalence of DM in The Netherlands increased from 454,000 to 641,000 patients. Severe cardiovascular complications attributed to diabetes increased from 18,000 to 39,000 patients. Total cost associated with antidiabetic drug treatment and hospitalizations, attributed to DM, increased from €442,308,000 to €822,333,000. Most of these costs (€535,672,000 in 2004) were due to hospitalizations. Cost of hospitalizations and cardiovascular drugs among control subjects increased from €275,123,000 to €608,392,000. **CONCLUSIONS:** Drug treatment, hospitalisations and cost attributed to diabetes mellitus have almost doubled between 2000 and 2004, but so did the "background" costs in the general population, perhaps due to preventive efforts.

PDB15

COMPARATIVE COST-UTILITY ANALYSIS OF LONG-ACTING INSULIN ANALOGUE (INSULIN DETEMIR) AND NPH INSULIN FOR THE TREATMENT OF TYPE 1 AND TYPE 2 DIABETES AND THE BUDGET IMPACT ANALYSIS OF INSULIN ANALOGUE REIMBURSEMENT IN POLAND

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OBJECTIVES: To compare cost-utility of detemir and NPH insulin in intensive insulin therapy (IIT) of type 1 diabetes patients, cost-utility of detemir and NPH insulin in basal-bolus IIT or added to oral antidiabetes treatment in type 2 diabetes. To estimate the impact of insulin detemir reimbursement on the budget (BIA) of the National Health Fund in Poland. **METHODS:** Cost-utility analysis from payers' (Polish National Health Fund and patient) perspective in lifetime horizon was conducted using CORE Diabetes Model. The effectiveness data were derived from clinical studies. The model default values and experts' opinion served as data sources for resource use. BIA: Two scenarios were compared: before and after reimbursement of insulin detemir with reimbursement limit equal to the drug price. Population of patients treated with insulin detemir was assumed to consist of type 1 and type 2 patients with documented episodes of severe hypoglycaemia, undergoing IIT (with use of standard basal insulin NPH). **RESULTS:** CUA: Insulin detemir in type 1 and type 2 diabetes patients is more costly and more effective than NPH insulin in terms of patients' life expectancy and quality adjusted life years (QALYs) gained—cost per QALY gained is: PLN161,138 (€47,512) in type 1 diabetes treatment; PLN603,107 (€177,829), assuming use of basal-bolus intensive insulin therapy in type 2 diabetes; PLN72,583 (€21,401), assuming use of long-acting insulin with oral antidiabetes drugs in type 2 diabetes. A Predicted number of patients annually treated with insulin detemir amounts to 6 736. In case of insulin detemir reimbursement yearly public payer's (NHF) expenditures for long-acting insulins used in intensive insulin therapy would increase by PLN 6,1mln (€1,8mln), i.e. 20% compared to a current situation. **CONCLUSIONS:** Type 1 and type 2 diabetes treatment with insulin detemir offers an improvement of patients' quality of life, being more costly than standard intensive insulin therapy with NPH.

PDB16

THE COST-UTILITY AND BUDGET IMPACT ANALYSIS OF SITAGLIPTIN (JANUVIA®) IN TYPE 2 DIABETES IN POLAND

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OBJECTIVES: To estimate the cost-utility of sitagliptin (Januvia®) in the treatment of type 2 diabetes and impact of Januvia® reimbursement on Polish National Health Fund (NFZ) budget. **METHODS:** Cost-utility Markov model from both payers' perspective (NFZ and patient) was constructed with one year time horizon. Target population were patients with insufficient glycemic control with metformin monotherapy. One comparison: sitagliptin/metformin vs metformin/glipizide was performed in CUA. The measure of the effects was QALY. BIA was performed from public payers' and both payers' (NFZ and patient) perspective in 3-year time horizon. Two reimbursement levels were considered 30% and 100%. **RESULTS:** Average costs of the treatment of diabetes were 3 218.37 PLN for SIT/MET and 1 317.76 PLN for GLI/MET. Treatment effects were 0.715 QALY for SIT/MET and 0.687 QALY for GLI/MET. ICER value for SIT/MET vs GLI/MET was 67 027 PLN/QALY. Assuming 100%-reimbursement, annual expenses from National Health Fund budget would raise by 9.1 (year 2008), 15.9 (2009) and 20.5 mln PLN in year 2010. In case of 30%-reimbursement of sitagliptin, incremental expenditures for NFZ would be: 6.25, 10.94 and 14.07 mln PLN in years 2008, 2009 and 2010 respectively. Assuming both payers' perspective annual expenses from NFZ budget and patient would raise by: 8.3 (year 2008), 14.5 (2009) and 18.6 mln PLN in year 2010. **CONCLUSIONS:** Results of the analysis indicate that sitagliptin/metformin treatment is more effective and more expensive than strategy with metformin/glipizide. ICER is below the acceptable threshold (83,239 PLN), therefore treatment with SIT can be considered as cost-effective.

PDB17

A COMPARISON OF COSTS AMONG PATIENTS WITH TYPE 2 DIABETES WHO INITIATED THERAPY WITH EXENATIDE OR INSULIN GLARGINE

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OBJECTIVES: Compare costs among patients with type 2 diabetes (T2D) treated with exenatide or insulin glargine. These are injectable agents typically used after failure on oral antidiabetic agent(s) **METHODS:** Data from September 2004 to September 2007 were obtained from a large retrospective claims database. Intent-to-treat cohorts of insulin-naïve adults diagnosed with T2D who initiated therapy on either exenatide (N = 4090) or insulin glargine (N = 1660). Individuals were not allowed to use the other medication or other insulin in the one-year follow-up period. Annual total medical costs and total diabetes related medical costs were estimated using stepwise multivariate regressions. Major cost components were also examined using either stepwise multivariate regressions or a two-part model that controlled for the probability of using the service. Smearing estimates were used to transform estimated log costs into costs. The analyses controlled for the potential impact of patient demographics, general health, prior resource use, comorbidities, and timing of treatment initiation. **RESULTS:** Initiation with exenatide compared to insulin glargine, was associated with significantly lower total direct medical costs ($19,293 vs $23,782, $p < 0.001$) and total diabetes-related medical costs ($7,833 vs $8,536, $p < 0.0001$). Initiation of therapy with exenatide compared to insulin glargine was also