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 docu-
mented 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 expect-
ancy 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 antidia-
betes 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)
annually treated with insulin detemir amounts to 6 736. In case
of insulin detemir reimbursement yearly public payer’s (NHF)
expenses 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 improve-
ment of patients’ quality of life, being more costly than standard
insulin therapy with NPH.

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 dia-
betes (T2D) treated with exenatide or insulin glargine. These are
injectable agents typically used after failure on oral antidiabetic
agent(s) METHODOLOGY: 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 multi-
varying 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 initia-
tion. RESULTS: Initiation with exenatide compared to insulin
glargine, was associated with significantly lower total direct
medical costs ($19,293 vs $23,792, 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