

PDB12

BUDGET IMPACT ANALYSIS OF THE INTRODUCTION OF ROSIGLITAZONE IN THE TREATMENT OF TYPE-2 DIABETES. THE ITALIAN NHS PERSPECTIVE

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OBJECTIVES: To evaluate the budget impact on the Italian NHS of rosiglitazone based treatment strategies, compared to current therapy. **METHODS:** Estimated target population for alternative treatments was based on algorithms previously reported*. Three groups of patients were identified to compare alternative treatment strategies: 1) Rosiglitazone monotherapy vs. SU monotherapy; 2) Rosiglitazone + metformin vs. SU + metformin; and 3) Sigitazone + SU vs. insulin alone or in association with SU. The perspective used was that of the Italian NHS. Time horizon was one year. Costs/patient/year considered were: drug acquisition costs; glycaemia self-monitoring costs; severe hypoglycaemias costs; and clinical tests costs (according to therapy). Glycaemia self-monitoring assumptions were based on AMD (Italian Association of Diabetologists) guidelines. Sensitivity analysis was performed to test the robustness of the assumptions made and their influence on the results. **RESULTS:** The epidemiological algorithms assigned 19.84% of patients to group 1, 37.8% to group 2 and 42.36% to group 3. Treatment costs/patient/year were: group 1—€459,91 for rosiglitazone vs. €469,06 for SU; group 2—€531,06 for rosiglitazone + metformin vs. €540,20 for SU + metformin; group 3—€749,44 for rosiglitazone + SU vs. €1.258,11 for insulin + SU and €1.832,97 for insulin alone. For a hypothetical cohort of 10,000 patients, total costs were: group 1—rosiglitazone €912,460.31 vs. SU €930,581.45; group 2—rosiglitazone + metformin €2,007,419.76 vs. SU + metformin €2,041,944.92; group 3—rosiglitazone + SU €3,174,623.90, insulin + SU €1,862,082.89 and insulin alone €5,051,558.94. Total costs of Rosiglitazone based therapy were €6,094,503.97 vs. €9,886,168.20 of current treatments. **CONCLUSIONS:** Rosiglitazone, when compared to alternative treatment, may offer potential savings to the Italian NHS estimated by our model in €3,791,664 every 10,000 diabetics per year. Savings were mainly related to a reduction in costs of glucose self-monitoring and insulin administration.* Drug utilization of glitazones in Italy. ISPOR, 7th Annual European Congress.

PDB13

THE ESTIMATION OF POTENTIAL BUDGETARY IMPACT OF INSULIN GLARGINE IN POLISH SETTINGSKamiński B¹, Niewada M², Latek M¹, Lis J³, Gierczynski J³¹Warsaw School of Economics, Warszawa, Mazowieckie, Poland;²Medical University of Warsaw, Warsaw, Poland; ³Sanofi-Aventis

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OBJECTIVES: To estimate incremental drug costs and savings resulting from hypoglycemia risk reduction produced by insulin Glargine compared to NPH insulin from payers perspective in Poland. **METHODS:** Epidemiological data and expert panel were used to evaluate the number of patients eligible for insulin Glargine treatment in Poland. Logistic model of switching rate from NPH insulin to insuline Glargine was developed for 3 years time horizon for diabetes patients according to NICE guidelines. Net drug costs reflect incremental acquisition costs per i.u. as well as difference between mean daily doses of insulin Glargine

and NPH. Savings resulting from hypoglycemia risk reduction were estimated based on literature review and unit cost of hypoglycemic event treatment (payers' perspective; event associated with hospitalization or ER visit). **RESULTS:** Number of patients eligible for insuline Glargine treatment was estimated at 64 608 patients accounting for 5.48% of all diabetic patients in Poland. Mean annual drug costs were estimated at 24.5mln EUR (PPP value) while savings resulting from hypoglycemia risk reduction at 4mln EUR. Subgroup showed for patients with annual hypoglycemia risk reduction associated with insulin Glargine 68.4% drug acquisition expenditures, which are balanced by hypoglycemia treatment savings. **CONCLUSIONS:** Insulin Glargine treatment was found to be budgetary neutral from payers' perspective for patients with very high risk of hypoglycemia in Poland.

PDB14

COST OF DIABETES MELLITUS TYPE-2 AND SELF MEASUREMENT OF BLOOD GLUCOSE IN GERMANY: A HEALTH INSURANCE PERSPECTIVEWeber C¹, Neeser K¹, Wenzel H², Schneider B³¹Institute for Medical Informatics and Biostatistics (IMIB), Basel, BS, Switzerland; ²University of Bielefeld, Bielefeld, Germany; ³Institut für Biometrie, Hannover, Germany

OBJECTIVES: It is extremely difficult to assess the prevalence, the total costs of Diabetes mellitus and the impact of self measurement of blood glucose (SMBG) for the German health care system. The last sound assessment of the total costs is based on the CODE-2 study, although this study reflects the situation in 1998. **METHODS:** In this analysis we assessed the total costs of diabetes mellitus type-2 and self measurement of blood glucose (SMBG) for the German health care system in the year 2004, based on the analysis of a retrospective, multicenter trial carried out recently, dealing with the impact of SMBG on long term patient outcomes. Our assessment is based on costs for 18 diabetes related complications (including surgical interventions), follow-up-costs for these complications, costs for outpatient physician services, cost of antidiabetic and additional pharmaceutical treatment and costs for strips and lancets for patients performing SMBG. **RESULTS:** Overall, yearly costs for the treatment of diabetes mellitus type-2 and its complications amounts to €3489 per patient. This equals to 4.6% to 8.2% of the German health care expenditure, in function of the estimated prevalence of the disease in Germany. The cost difference between the cohort with and without SMBG was not essential (€276 higher costs in the cohort with SMBG). This cost difference should be connected with a reduction of mortality from 4.6 to 2.7% and a reduction of non-fatal endpoints from 10.4 to 7.2% for the Non-SMBG and SMBG group respectively reported in the underlying study. **CONCLUSIONS:** From a public health standpoint, prevention of diabetes mellitus or at minimum prevention of its complications by optimizing glucose metabolism should be given highest priority in times of limited resources for health care. SMBG may be a valuable tool to achieve this target.

PDB15

A MODEL BASED ANALYSIS OF COSTS AND EFFECTIVENESS OF CHIROPDIST CARE IN DIABETEC PATIENTSHabacher W¹, Rakovac I¹, Plank J², Haas W², Beck P¹, Pieber TR¹¹Joanneum Research, Graz, Styria, Austria; ²Medical University Graz, Graz, Styria, Austria

OBJECTIVE: The diabetic foot is a complex late complication, it is difficult to treat and has severe impact on quality of life and causes an enormous financial burden for society. Aim of this