COSTS OF PEN (NOVOPEN(r) 3) VERSUS SYRINGE IN THE TREATMENT OF DIABETES MELLITUS TYPE 2—A PHARMACOECONOMIC STUDY FROM THE SLOVAK REPUBLIC

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OBJECTIVE: There is a practically stable 5.3% prevalence of diabetes mellitus (DM) in Slovakia. The treatment ratio was as follows: 47.6% patients are on diet, 30.8% on PAD and 21.6% on insulin. The main objective of this study was to determine if the intensified insulin therapy with insulin pen is cost-effective compared to conventional therapy. METHODS: Direct medical and non direct costs were evaluated in retrospective randomized study in patients with DM type 2. A group of 48 patients on intensified insulin therapy (IIT) was compared with a group of 28 patients treated with conventional therapy (CT). RESULTS: The average duration of DM was 113.51 months in IIT group and 147.67 months in CT group. The significant difference (p < 0.05, s) was observed in age (53.19 in IIT vs 55.11 in CT) and in serum cholesterol (6.14 in IIT vs 6.65 in CT). The hospital costs were higher in IIT: €568 vs. €511 in CT. The laboratory costs were lower in IIT: €133 vs. €167 in CT. IIT had higher costs for reimbursed drugs, glucometers and insulin pens by Health Insurance Companies: €1065 vs. €1024 in CT. No statistical difference was recorded in co-payments: €99 in IIT vs. €100 in CT. Indirect patients costs based on time loss were €185 in IIT vs. €227 in CT. The total costs per patient per year were €1972 in IIT vs. €1964 in CT. CONCLUSION: The treatment of DM type 2 with insulin pen NovoPen® 3 is clinically and economically effective in comparison to the treatment with syringe. The estimated costs of LYS are €4759 in men and €6519 in women per patient with DM in Slovakia.

THE BUDGET IMPACT OF APIDRA(r) (INSULIN GLULISINE) REIMBURSEMENT IN POLAND

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OBJECTIVE: To assess the impact of Apidra®, a new rapid-acting insulin analog used in type 1 and 2 diabetes, on the health care system in Poland. METHODS: Budget impact analysis has been programmed using Microsoft Excel® 2003. Five-year population-based model assumes that Apidra® will gain market shares from rapid- and short acting insulins in proportion to their original market shares distribution. Limit and reimbursement rate of Apidra® was set equal to that of other rapid/short acting insulins. In addition to the cost of insulins, the cost of blood glucose monitoring strips was included in the total annual costs. The perspective of: 1) public payer, 2) public payer + patient; was considered separately. A range of compliance levels were also taken into account. Sensitivity analysis (including the analysis of extreme scenarios—most pessimistic and optimistic) was performed to account for uncertainty in input parameters. RESULTS: Financing Apidra® from public means will have no consequences for a public payer, which results from equal limits for all rapid- and short acting insulins. From the perspective of both payers for health care services (NHF and patient), incremental costs associated with introducing Apidra® to the market increase from €42–1 018 PLN (0.0001–0.0002%) in year one to €20 307–32 226 PLN (0.0044–0.005%) in the 5th year post-launch, depending on the drug compliance level assumed (230 or 365 days/year). Results were most sensitive to the change of Apidra(r) price. CONCLUSION: Results of the analysis indicate that decision to finance Apidra® from public means in Poland would have no consequences for a public payer, and the impact from the perspective of both payers (public payer and patient) is not likely to be significant.