

metrics were adjusted for patient compliance with OADs as reported in the literature. These metrics are reported as adjusted and unadjusted estimates for patient compliance over a three-year time frame. **RESULTS:** In this scenario, market share for pioglitazone plus glimepiride was assumed to increase from 0.04% (2006) to 0.36% (2007) to 0.50% (2008). Projected annual treatment costs adjusted for compliance ranged from \$22,240 (2006) to \$200,164 (2007) to \$278,006 (2008). Unadjusted estimates range from \$35,295 (2006) to \$317,652 (2007) to \$441,183 (2008). Projected PMPM costs adjusted for compliance ranged from \$0.002 (2006) to \$0.017 (2007) to \$0.023 (2008). Unadjusted PMPM estimates range from \$0.003 (2006) to \$0.026 (2007) to \$0.037 (2008). **CONCLUSION:** The budget impact of adding pioglitazone plus glimepiride on formulary was minimal over a three-year time frame in both scenarios. This is driven by anticipated market projections estimating the utilization of pioglitazone plus metformin among the class of OAD agents.

PDB15

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 ($p < 0.05$) 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.

PDB16

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 642–1 018 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.

PDB17

AN EVALUATION OF EXPECTED WASTE OF GROWTH HORMONE PEN DEVICES AND AN ELECTRONIC GROWTH HORMONE DELIVERY DEVICE

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OBJECTIVE: Somatotropin is human growth hormone (GH) produced by recombinant DNA technology. Several somatotropin products with unique delivery devices are available. When administering the last dose from a device, patients may have an insufficient amount of GH remaining for a full dose. Based on a survey of parents/patients using pen devices conducted at the 2007 MAGIC Foundation Convention, 63% of respondents reported that they were likely to discard this remaining amount left in the cartridge (i.e., waste). easypod, an electronic GH delivery device for somatotropin (rDNA origin) for injection (EMD Serono, Inc.), contains a dose spread feature designed to minimize waste. A model was developed to estimate potential GH waste per patient with pen devices and the easypod device and quantify the potential annual economic impact. **METHODS:** Base case model utilizes a daily dose (2 mg) reflective of the national mean for all GH pen devices (Wolters Kluwer, 2007). A 10% mechanical loss is applied uniformly across all devices based on the reported mechanical loss in the prescribing information for somatotropin (rDNA origin) for injection (EMD Serono, Inc.). Model assumes that the easypod dose spread function ($\pm 10\%$; $\pm 25\%$; or $\pm 50\%$) is activated by the clinician (base case utilizes $\pm 25\%$). This function minimizes waste by automatically adjusting the daily dose (+/-) to optimize the cartridge content; the cumulative average of injected doses is equal to the prescribed daily dose. Annual cost of GH waste per patient for each device is reported (wholesale acquisition cost, Medispan, 2007). **RESULTS:** Expected annual cost of GH waste per patient was lowest for easypod (\$112). Results for pen devices ranged from \$794 to \$3363 (using largest cartridge size for each product). Results fluctuate depending on daily dose, cartridge