the model as to its ability to modify input parameters. The model was externally validated against epidemiological data from Russia. Mortality and complications risk equations coefficients were modified in accordance with mortality rates due to complications in Russia. Cost-effectiveness analysis was performed. **RESULTS:** The developed model allows assessing the risk of more than 15 type 2 DM complications in 5 years in patients with predefined risk factors. Among comparison of 5 strategies of type 2 DM therapies (no therapy, vildagliptin, sitagliptin, liraglutide, and exenatide) liraglutide was considered the cost-effective strategy with ICER/QALY - 470120.40 RUR, which is 51% of the willingness-to-pay threshold in Russia. With the lowest complication treatment costs inside the total direct costs, liraglutide monotherapy demonstrated the most long-term sustainable blood glucose control and HbA1c goal parameters. **CONCLUSIONS:** The developed model allows increase in compliance of therapy. Possibility of individual choice of the most cost-effective treatment regimen for each patient leads to so-called "personalized" therapies.

PDB39

HEALTH CARE RESOURCE UTILIZATION AND COSTS ASSOCIATED WITH TREATMENT OF POLISH ACROMEGALIC PATIENTS WITH LANREOTIDE AUTOGEL 120 MG – A RETROSPECTIVE OBSERVATIONAL COHORT ANALYSIS

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OBJECTIVES: To estimate the resource utilization and related costs for Polish acromegalic patients treated with lanreotide AUTOGEL 120 mg (ATG120) in routine clinical practice **METHODS:** Medical care resource (dosage regimens, diagnostic procedures, hospitalizations, out-patient visits, any treatment changes) were collected during 1-year retrospective phase of non-intreventional, observational study (Lanro-Study). The study population consisted of acromegalic patients treated for at least three injections with ATG120. The endpoints were: proportion of patients treated for acromegaly with a given pharmaceutical in a given dosing interval, resource utilization, costs per patient/month or year. Costs were calculated in PLN from the public health-care payer perspective for the year 2013 (1 EURO = 4.2 PLN). **RESULTS:** A otal of 143 patients were included in the analysis (72% women, 80% macroadenoma, 72% previous pituitary surgery). Changes in the treatment scheme were reported in 54 patients. The mean cost of treatment in patients who switched from octreotide LAR (LAR) to ATG120 (n=26) was 6060.01 PLN/patient/month with LAR and 4047.96/patient/month PLN when switched to ATG120. At the time all patients entered the prospective phase, and were receiving ATG120, the mean cost of treatment with ATG120 was estimated at 3941.84 PLN/patient/month. Most patients (n=100; 70%) received ATG120 at dosing intervals less frequent than every 4 weeks. Patients were predominantly treated in out-patient setting with 4.77 physician visits/patient/year, most common control examinations were magnetic resonance imaging of brain and brain stem (0.57/patient/year), ultrasound of neck (0.55/patient/year), and IGF-1 (1.96/patient/year), GH (1.49/patient/year), glycemia (0.91/patient/year), pituitary-thyroid axis hormones (TSH- 0.45/patient/year, T4-0.49/patient/year). Only 7.7% patients were hospitalized. The mean medical cost, excluding pharmacotherapy, was 1002 PLN/patient/year. **CONCLUSIONS:** These results represent the current use of ATG120 in the population of Polish acromegalic patients in a realistic clinical settings and indicate that this therapy may provide cost saving in comparison to octreotide LAR.

PDB40

ASSESSMENT OF REAL-WORLD USAGE OF LANREOTIDE (SOMATULINE AUTOGEL) 120 MG IN POLISH ACROMEGALIC PATIENTS – RESULTS FROM 1 YEAR PROSPECTIVE PHASE OF LANRO-STUDY

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OBJECTIVES: To assess the treatment pattern, dosage and costs of lanreotide AUTOGEL 120 (L-ATG120) administered as part of routine acromegaly care in Poland. **METHODS:** Lanro-Study is a multicenter, non-interventional, observational study on resource utilization in the population of Polish acromegalic patients treated with L-ATG120 at 4 weeks or extended (>4 weeks) dosing interval. The study recruited adult acromegalic patients treated medically for ≥ 1 year, including at least 3 injections of L-ATG120. Data on dosing interval and aspects of administration were collected prospectively during 12-months (interim analysis). Costs were calculated in PLN from the public health care payer perspective for the year 2013 (1 EURO = 4.2 PLN). **RESULTS:** A total of 139 patients were included in the analysis. Changes in dosing regimen were reported in 14 (9.4%) patients, polytherapy was used in 11 (8%) patients. 70 patients (50%) received L-ATG120 at an extended dosing interval (> 4 weeks), the mean number of days between injections was 35.56 (SD 8.4). L-ATG120 was predominantly administered in out-patient setting (77%), by health care professionalists (94%). Mean time needed for preparation and administration was 4.33 and 1.58 min., respectively, mean product wastage – 0.13 mg. The cost of L-ATG120 was estimated at 4103.87 PLN/patient/month **CONCLUSIONS:** These results represent the current use of L-ATG120 in the population of Polish acromegalic patients in a realistic clinical settings. Findings that 50% of patients could be treated with dose intervals of longer than 28 days support the potential for L-ATG120 of reducing treatment burden.

PDB41

COST-EFFECTIVENESS OF UNIVERSAL SCREENING FOR THYROID DISEASE IN PREGNANT WOMEN IN SPAIN

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OBJECTIVES: Hypothyroidism in pregnancy can lead to adverse obstetrical outcomes. Universal screening in pregnant women for thyroid disease allows diagnose and treat cases of overt and subclinical hypothyroidism that are potentially missed when screening only women at high risk. The objective of the study was to assess the cost-effectiveness of universal screening as an alternative to high risk screening and no screening for thyroid disease in pregnant women in Spain. **METHODS:** The model compared the incremental cost per quality adjusted life-year (QALY) of universal screening versus high risk screening and versus no screening. A decision analytic model was used for the pregnancy and post-partum period. Probabilities from randomized controlled trials were considered for adverse obstetrical outcomes. A Markov model was used to assess the lifetime period after the first post-partum year and accounted for the development of overt hypothyroidism. Main assumptions of the model and the use of resources were validated by local clinical experts. The analysis considered only direct health care costs (euros 2013). A 3% discount was applied to costs and QALYs for the period beyond one year. **RESULTS:** Universal screening gained 0.011 QALYs over high risk screening and 0.014 QALYS over no screening. Total direct costs per patient were €5,791 for universal screening, €5,796 for high risk screening and €5,786 for no screening. Universal screening was dominant compared to risk-based screening and highly cost-effective alternative compared to no screening with an ICER of €374 per QALY. **CONCLUSIONS:** Universal screening of pregnant women in the first trimester for thyroid disease is dominant in Spain compared to the current type of screening which is risk-based, as well as cost-effective compared to no screening.

PDB42

COST-EFFECTIVENESS OF COMBINED TREATMENT OF METFORMIN AND FENOFIBRATE ON RETINOPATHY PROGRESSION

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OBJECTIVES: To evaluate the cost-effectiveness of intensive glycemic control (metformin) combined with fenofibrate in its impact on retinopathy progression compared to the treatment with metformin only in patients with type 2 diabetes. **METHODS:** Design: Markov decision model of retinopathy progression. Population: 40-year old patient with type 2 diabetes followed for 29 years. Main outcome measures: Risk of visual impairment; incremental cost-effeciveness ratio (ICER) for the two treatment options: one combining metformin and fenofibrate, and one using solely metformin. **RESULTS:** Combined tretament of metformin and fenofibrate resulted in ICER of -133.06 GBP per QALY which means that the intervention is not only effective but is also potentially saving money to the National Health Service; tretament solely with metformin is therefore dominated. **CONCLUSIONS:** Results of our study suggest that patients suffering from type 2 diabetes will receive from additional treatment with fenofibrate substantial benefits of protection against early microvascular complications related to retinopathy, including blindness. The favorable cost-effectiveness of intensive glycemic control combined with fenofibrate will likely be further increased if other major microvascular complications (e.g., non-traumatic amputations) and macrovascular complications (e.g., total cardiovascular events) of type 2 diabetes are taken into account. Our study is one of the first to compare cost-effectiveness of combined treatment of metformin and fenofibrate with current intensive glycemic control using solely metformin in its impact on retinopathy progression. Our study also provides evidence which may be useful in shaping the current clinical practice in the UK and European Union.

PDB43

REAL WORLD OUTCOMES IN TYPE 2 DIABETES: LOWER COST OF TREATING PATIENTS TO A1C<7% WITH LIRAGLUTIDE VERSUS EXENATIDE

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OBJECTIVES: Type 2 diabetes (T2D) is characterized by progressive β-cell failure in the presence of insulin resistance. The LEAD-6 (Liraglutide Effect and Action in Diabetes) clinical trial program compared the efficacy and safety of liraglutide once-daily (LIRA) to exenatide twice-daily (EXEN). Few studies have explored the real-world effectiveness, and associated costs, of these comparators. Glycemic goal attainment of A1C<7% and total diabetes-related pharmacy costs in clinical practice were assessed over 6 months follow-up. **METHODS:** A retrospective cohort study using integrated medical and pharmacy claims and linked A1C results from the IMS Patient-Centric Integrated Data Warehouse was conducted. T2D patients ≥18 years naïve to GLP-1, DPP-IV and insulin use during a 6 months pre-index period, with evidence of ≥1 prescription for LIRA (N=234) or EXEN (N=182) between January 2010 and December 2010 were identified. Only patients who were persistent on their index treatment during a 6 months post-index period were included in the analysis. The percentage of patients achieving A1C<7% and total diabetes-related pharmacy costs were estimated using multivariable modelling to control for confounding effects. The cost per successfully treated patient was calculated as total diabetes-related pharmacy costs divided by the percentage of patients achieving A1C<7%. **RESULTS:** The percentage of patients reaching A1C<7% was 64.4% and 53.6% for LIRA and EXEN, respectively ($p<0.05$) (baseline A1C mean: 7.8% for both LIRA and EXEN). Average total diabetes-related pharmacy costs per patient at 6 months were higher for LIRA than EXEN ($2,002 vs $1,799, $p<0.001$) but when assessed as cost per patient successfully reaching A1C<7%, LIRA was cost-effective compared to EXEN ($3,108 vs $3,354, $p<0.0001$). **CONCLUSIONS:** The average cost of treating a patient to A1C<7% at 6 months follow-up was lower with LIRA than EXEN. This suggests LIRA to be a cost-effective treatment option compared to EXEN in the management of T2D.