each drug), as well as lab and imaging tests, were collected with the Delphi technique via an expert panel with 11 experienced endocrinologists, from University and Public Hospital specialized units. Local unit cost data were collected from officially published sources (Ministry of Health and Social Insurance Funds). One way sensitivity analyses were performed to test the results. **RESULTS:** Lanreotide Autogel reduced total costs of acromegaly treatment by €29,896 per patient over the 30-year time horizon. 93% of the savings were attributed to the reduction in drug acquisition and administration costs. Discount rate was the most influential parameter in the sensitivity analysis. The total cost of managing acromegaly in Greece, including lab and imaging tests, over a 5-year time horizon was estimated to range between €22.9 and €22.2 million, with a 30% and 60% market share for Lanreotide Autogel, respectively. Therefore, doubling Lanreotide Autogel's share would lead to total savings of €781,604. **CONCLUSIONS:** Lanreotide Autogel in comparison with Octreotide LAR may result in a reduction of the total cost in the management of acromegaly in Greece.

PDB97

THE OPPORTUNITY OF TREATING TYPE II DIABETES WITH DPP4I: AN ECONOMIC EVALUATION VERSUS CONVENTIONAL TREATMENT IN THE ITALIAN SETTING

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OBJECTIVES: To compare dipeptdyl-peptidase 4 inhibitors (DPP4i) and sulfonylurea (SU) for the treatment of type II diabetes mellitus in terms of economic impact and considering both the Italian National Health System (NHS) and the societal perspective. **METHODS:** The economic evaluation was performed as a model-based cost-minimization analysis for the comparison DPP4i and SU as second line therapy, in add-on to metformin, over 1-year period. Clinical events to be included in the model were selected from literature review and the opinion of a panel of clinical experts. Resources used were quantified and valued adopting costs and tariffs related to drugs used, glycaemic auto-monitoring, established control visits, incidence of hypoglicaemic events, macrovascular complications and the switch to insulin therapy. One-way sensitivity analyses for model inputs were conducted. **RESULTS:** Due to the higher cost for drug acquisition in the base case analysis total direct costs for the Italian NHS were about 728 Euro per patient/year in the case of DPP4i and on average 702 Euro for SU. The overall yearly cost for the society was estimated to be about 728 Euro per patient in the case of DPP4i while it was on average 770 Euro when considering SU because DPP4i induced lower direct non-health costs related to stroke and an overall saving of 20.88 Euro per patient/year due to lower costs of productivity loss for hypoglicaemic events and stroke. **CONCLUSIONS:** The use of DPP4i was cost-saving from the societal perspective and just the high cost for drug acquistion made the adoption of DPP4i more costly than SU for the Italian NHS. This result outlined that DPP4i represents a valuable alternative for the management of diabetes both from a clinical and economic perspective and costs will be lowered overall just intervening on cost for drug acquisition.

PDB98

COST-MINIMISATION ANALYSIS OF SAXAGLIPTIN COMPARED TO SITAGLIPTIN AND LINAGLIPTIN AS TRIPLE THERAPY IN COMBINATION WITH METFORMIN AND A SULPHONYLUREA IN THE TREATMENT OF TYPE 2 DIABETES MELLITUS FROM A UK HEALTH CARE PERSPECTIVE

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OBJECTIVES: To evaluate the cost of using the dipeptidyl peptidase-4 inhibitor (DPP4i), saxagliptin, compared to sitagliptin and linagliptin, when used as triple therapy in combination with metformin and sulphonylurea (met+SU) for the treatment of patients with type 2 diabetes mellitus (T2DM) who are inadequately controlled on met+SU alone. **METHODS:** Bucher adjusted indirect treatment comparisons (ITCs) were performed with regards to the key T2DM outcomes of HbA1c, weight and hypoglycaemia compared to sitagliptin and linagliptin. The ITCs found no statistically significant differences between saxagliptin compared to either sitagliptin or linagliptin in terms of effectiveness (as measured by Hb1Ac change from baseline), and saxagliptin was found to be at least as safe as the other therapies. Therefore, a cost-minimisation analysis over a 1-year time horizon was developed from a UK health care perspective. Drug costs were considered in the model, sourced from the British National Formulary (BNF; September 2013). The application of an annual discount rate of 3.5% and use of a longer time horizon (up to 5 years) were explored in a scenario analysis. **RESULTS:** Saxagliptin was associated with a yearly cost of £410.80 per patient. The yearly cost per patient for sitagliptin was £432.38, and the yearly cost per patient for linagliptin was also £432.38, based on drug costs. Therefore, saxagliptin has similar costs compared to the other DPP4i's. Applying the annual discount rate and using a longer time horizon, saxagliptin was associated with cost-savings of £97.43 per patient over 5 years compared to both sitagliptin and linagliptin. **CONCLUSIONS:** Saxagliptin as triple therapy in combination with met+SU was shown to be a cost-saving treatment option from a UK health care perspective for patients with T2DM who are inadequately controlled on met+SU alone. The cost-saving per patient over 5 years was modest, although this may be important in a large patient population.

PDB99

COST-EFFECTIVENESS OF SITAGLIPTIN VERSUS SULFONYLUREA AS AN ADD-ON THERAPY TO METFORMIN IN PATIENTS WITH TYPE 2 DIABETES IN A BELGIUM SETTING

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OBJECTIVES: Assess the cost-effectiveness of sitagliptin versus sulfonylurea as an add-on therapy to metformin among type 2 diabetes patients currently on metformin but not achieving HbA1c goal in Belgium. **METHODS:** We employed a previously published individual-level simulation model that incorporated risk equations/algorithms from the UKPDS Outcomes Model (68) to predict the long term risks of type 2 diabetes-related complications. The impact of treatments on risk factors and side effects was based on clinical trials, observational studies, systematic reviews and meta-analyses of relevant RCTs, as well as the most recent findings on the potential benefit of DPP4 on other-cause mortality and cardiovascular diseases and the possible detrimental effect of sulfonylurea on myocardial infarction (MI). European patient profiles and Belgium-specific data on drug prices, diabetes-related complication treatment costs, treatment patterns and guidelines were used. **RESULTS:** A sitagliptin-based treatment strategy was projected to cost €1,102 more than a sulfonylurea-based treatment strategy per patient lifetime, with the majority of excess costs from prescription drugs. Life expectancy was 0.077 years greater per patient on a sitagliptin-based strategy compared to a sulfonylurea-based strategy. The discounted gain in QALY was 0.082 years with the sitagliptin-based strategy, driven by better hypoglycemia, weight, and MI risk profile. The estimated ICER was €13,460/QALY. Sensitivity analyses demonstrated that the ICER was somewhat sensitive to the price of sulfonylureas and the weight utility decrement, and most sensitive to assumptions on relative risk parameters. When no relative risk reduction on MI or other-cause mortality was assumed, the ICER was €17,543/QALY and €17,053/QALY, respectively. When no relative risk reduction on either MI or other-cause mortality was assumed, the ICER increased to €23,691/QALY. **CONCLUSIONS:** Using a threshold of €15,000 per QALY gained, compared to a sulfonylurea-based treatment strategy, a sitagliptin-based treatment strategy was cost-effective in metformin-failed patients with type 2 diabetes in Belgium.

PDB100

COST-EFFECTIVENESS OF EXENATIDE TWICE DAILY (BID) ADDED TO BASAL INSULIN COMPARED TO A BOLUS INSULIN ADD-ON IN TURKEY

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OBJECTIVES: Type 2 diabetes (T2D) patients on basal insulin with uncontrolled HbA1c levels often receive an add-on with bolus insulin to lower HbA1c levels. The aim of this analysis is to estimate long-term cost-effectiveness of treating T2D patients with – a recently introduced – twice daily (BID) exenatide add-on to basal insulin strategy from a Turkish health care perspective. **METHODS:** Clinical inputs for both treatment strategies were taken from the GWDM clinical trial. The strategies were assessed using a micro-simulation disease model (CARDIFF). The model predicted micro-and macro-vascular complications based on the UKPDS equations. The incidence of adverse events, diabetes related complications and changes in body weight yielded estimates of health care costs and health utilities. The direct (T2D and complication) costs in the model reflect the Social Security Institution costs. Discounting both costs and effects at 3% over the 40 year follow-up of the model, resulted in life time estimates of costs and quality-adjusted life years (QALYs) on both treatment strategies. Deterministic and probabilistic sensitivity analyses, as well as elaborate scenario analyses were performed. **RESULTS:** Results showed that exenatide treatment significantly improves QALYs by 0.60 (95% CI: 0.24 to 0.97). Health effects were reached at an additional cost of 217 $ (95% CI: -356$ to 976$), resulting in an incremental cost-effectiveness ratio of 362 $ per QALY gained. Scenario analyses showed that these results were robust to changes in input parameters. At a willingness-to-pay threshold of 30,000 $/QALY the exenatide strategy had a near 100% probability of being cost-effective compared to bolus insulin. **CONCLUSIONS:** A twice daily exenatide add-on to basal insulin treatment for T2DM patients with uncontrolled HbA1c levels is considered a highly cost-effective strategy from the Turkish public health care perspective.

PDB101

COMPARATIVE COST-EFFECTIVENESS ANALYSIS OF ADDING TWICE-DAILY EXENATIDE TO INSULIN GLARGINE VERSUS ADDING INSULIN LISPRO TO TREAT TYPE 2 DIABETES IN SPAIN

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OBJECTIVES: When HbA1c is elevated above target in Type 2 diabetes (T2D) patients treated with basal insulin, the widespread strategy consists of adding mealtime insulin. An alternative option is adding twice-daily exenatide (BID), a glucagon-like peptide-1 receptor agonist. The objective was to estimate the cost-effectiveness in Spain of exenatide BID compared to mealtime bolus insulin lispro, both added to insulin glargine and metformin. **METHODS:** The published and validated CARDIFF long-term diabetes model was used to estimate the direct medical costs and quality-adjusted life years (QALYs) associated with each strategy. Patient characteristics at baseline, efficacy and safety inputs were all derived from a head-to-head, double-blind, randomized controlled trial (NCT00960661), comparing both strategies for 30 weeks. Based on the United Kingdom Prospective Diabetes Study-68 equations, the model predicted long-term disease progression and occurrence of micro-and macro-vascular complications, including mortality. Costs and utilities were assigned to complications, hypoglycaemias, adverse events and body mass index changes. The analyses were performed from the perspective of the Spanish health care payer, over a lifetime horizon, at a discount rate of 3% (costs and health outcomes). Univariate and probabilistic sensitivity analyses were conducted. **RESULTS:** Treatment with exenatide BID was projected to produce an incremental benefit of 0.61 QALYs (95 % CI: 0.26 to 0.99) compared to treatment with insulin lispro, at an additional cost of €146 (95% CI: -€ 1,114 to € 1,679) resulting in an incremental cost-effectiveness ratio of €239 per QALY gained. The exenatide BID strategy reached a probability near 100% of being cost-effective at a willingness-to-pay threshold of €2,500 per QALY gained. Sensitivity analyses showed that results were robust to variation in range of model parameters. **CONCLUSIONS:** Exenatide BID was predicted to be a cost-effective treatment alternative to mealtime bolus insulin in Spain for T2D patients not at target with insulin glargine.