adherence to medication (with insuficient local information). **CONCLUSIONS:** Sulfonylureas, other than glibenclamide, DPP-4 inhibitors and thiazolidinediones are cost-effective alternatives as second-line treatment for DM2 patients that require oral antidiabetics in Colombia. Patient adherence requires further local research.

PDB66
COST-EFFECTIVENESS ANALYSIS OF EXENATIDE TWICE DAILY (BID) VERSUS INSULIN GLARGINE ONCE DAILY (QD) AS ADD-ON THERAPY IN CHINESE PATIENTS WITH TYPE 2 DIABETES MELLITUS INADEQUATELY CONTROLLED BY ORAL THERAPIES

Deng J[1], Gu S[2], Shao H[3], Dong H[4], Zhao Y[5], Shi L[3]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, LA, USA, [2]Zhejiang University School of Medicine, Hangzhou, China, [3]Tulane University, New Orleans, LA, USA, [4]Zhejiang Univerisity, Hangzhou, China, [5]Xavier University of Louisiana, New Orleans, LA, USA

OBJECTIVES: To estimate cost-effectiveness of exenatide twice daily (BID) versus insulin glargine once daily (QD) as add-on therapy in Chinese type 2 diabetes patients not well controlled by oral anti-diabetic (OAD) agents. **METHODS:** The Cardiff model was populated with the data synthesized from three head-to-head randomized clinical trials up to 30 weeks in China comparing exenatide BID vs insulin glargine as add-on therapies to oral therapies in the Chinese population. The Cardiff model generated outputs including macrovascular and microvascular complications, diabetes-specific mortality, costs and quality-adjusted life years (QALYs). Cost and QALYs were estimated with time horizon of 40 years at a discount rate of 3% from the societal perspective **RESULTS:** Compared with insulin glargine plus OAD treatments, patients on exenatide BID plus OAD gained 1.88 QALYs, at an incremental cost saving of Chinese Renminbi (RMB) 114,593 (i.e., cost saving of RMB 61078/QALY). The cost-effectiveness results were robust to various sensitivity analyses including probabilistic sensitivity analysis. The variables with the most impact on incremental cost-effectiveness ratio included HbA1c level at baseline, health utilities decrement and BMI at baseline. **CONCLUSIONS:** Compared with Insulin glargine QD, exenatide BID as add-on therapy to OAD is a cost-effective treatment in the Chinese patients inadequately controlled by OAD treatments.

PDB67
COST ANALYSIS OF THE DIABETIC TREATMENT IN ITALY: THE ROLE OF VILDAGLIPTIN VS. OTHER THERAPEUTIC OPTIONS IN PATIENTS WITH TYPE 2 DIABETES WITH RENAL INSUFFICIENCY

Torre E[1], Colombo GL[2], Bruno GM[3], Valentino MC[3], Di Matteo S[3]
[1]Diabetologia e Malattie Metaboliche U.O. Genova-Ponente, Serra Riccò (GE), Italy, [2]University of Pavia, Milan, Italy, [3]S.A.V.E. Studi - Health Economics & Outcomes Research, Milan, Italy

OBJECTIVES: Diabetes mellitus type 2 is a chronic disease, with many issues both in terms of pathophysiology and therapy; its incidence is steadily increasing, in line with the increase of the aging population. For this reason, diabetes could be considered an emergency also for its economic burden. **METHODS:** We performed a cost minimization analysis to evaluate the impact of different treatments on patients with type 2 diabetes, kidney failure, on dialysis, from moderate to severe stage, who failed monotherapy with metformin. We considered direct and indirect costs: the resources consumed in providing facilities and those used to counter the negative effects of the different treatments, and production losses of patients. **RESULTS:** We compared the following hypoglycemic molecules: Pioglitazone (15, 30), Repaglinide (0.5, 1, 2), Vildagliptin50 and Linagliptin5. Regarding insulin therapy, we consider the following classifications: Insulins human, Basal analogs and Fast analogs. An analysis of the direct medical costs of treatment and loss of production shows an average annual cost per patient treated with insulin between € 1,005.63 - € 1,098.34, with differentials cost vs. other hypoglycemic strategies between € 174 and € 203. The cost for the management of hypoglycemia is greatest with the insulin treatment but with a limited impact on the total cost of health care and treatment. The loss of working days due to treatment and to hypoglycemic episodes have a considerable impact (71% of the total cost). The total cost related to a treatment with of Vildagliptin is in line with that of other strategies. Furthermore Vildagliptin has a lower economic impact, if taken into account indirect costs. **CONCLUSIONS:** The cost analysis of therapy applied to diabetes demonstrates that the use of Vildagliptin represents a choice, that is economically favorable if we consider the whole diabetic population costs, including renal insufficiency patients.

PDB68
COST-EFFECTIVENESS OF INCREASING THE INFLUENZA VACCINATION RATE IN ADULTS WITH TYPE 2 DIABETES IN TURKEY

Macabeo B[1], Akin L[2], Caliskan Z[3], Altinel S[4], Satman I[5]
[1]Sanofi Pasteur, Lyon, France, [2]Hacettepe University Faculty of Medicine, Ankara, Turkey, [3]Hacettepe University, Ankara, Turkey, [4]Sanofi Pasteur, Istanbul, Turkey, [5]Istanbul University Istanbul Medical Faculty, Istanbul, Turkey

OBJECTIVES: Influenza triggers high risk of complications in patients with diabetes. Influenza vaccination is safe and effective in diabetic patients. In Turkey, the prevalence of diabetes is high but the influenza vaccination coverage rate is low, 9.1% in 2014, despite vaccination being recommended and reimbursed in this population. This study therefore, evaluated the cost-effectiveness of increasing the influenza vaccination coverage rate of adults aged ≥18 years with type 2 diabetes in Turkey to 20%. **METHODS:** A decision-analytic model was adapted to Turkey using data derived from published sources. Based on the literature, patients with diabetes have a 6-fold increase in influenza-related hospitalization and 3-fold increase in influenza-related death compared to healthy individuals. Direct medical costs and indirect costs due to productivity loss were included in the societal perspective. Costs were calculated in Turkish Lira (TRY) (0.43 per US dollar in 2014). A one-year time horizon was set to reflect influenza seasonality. **RESULTS:** Increasing the influenza vaccination coverage rate to 20% is predicted to avert 19,777 influenza

cases, 2,376 hospitalizations, and 236 deaths. Associated influenza costs avoided were estimated at more than TRY 8.3 million, while the cost of vaccination would be more than TRY 8.4 million. The incremental cost-effectiveness ratio (ICER) was estimated at TRY 64/QALY, which is below the GDP per capita and very cost-effective. Factors most influencing the ICER were excess hospitalisation rate, inpatient cost, vaccine effectiveness against hospitalization, and attack rate. In addition, increasing vaccination coverage rate to above 20% was also estimated to be very cost-effective. **CONCLUSIONS:** Increasing the influenza vaccination coverage rate for adults with type 2 diabetes in Turkey to 20% or higher would be very cost-effective. To reduce influenza burden in diabetic patients, an integrated care approach is needed and all stakeholders need to cooperate to increase the vaccination coverage rates to WHO recommended levels.

PDB69
COST-UTILITY ANALYSIS OF INSULIN ANALOGUES COMPARED WITH MULTIPLE DAILY INJECTIONS OF HUMAN INSULIN FOR THE TREATMENT OF 15 YEARS OLD OR OLDER PATIENTS WITH TYPE 1 DIABETES MELLITUS IN COLOMBIA

Rosselli D[1], Quitian H[2], Gomez AM[2], Garcia Peña AA[2], Arciniegas J[2], Iragorri N[2], Mantilla B[2], Gomez-Restrepo C[2]
[1]Pontificia Universidade Javeriana, Bogotá, Colombia, [2]Pontificia Universidad Javeriana, Bogota, Colombia

OBJECTIVES: Insulin analogues offer certain advantages over regular human insulin. Our objective was to establish the incremental cost-effectiveness ratio (ICER) of insulin analogues compared with human insulin, with multiple daily injections (MID) in adult patients with type 1 diabetes mellitus (DM1) in Colombia. **METHODS:** We designed a Markov model of annual cycles, time horizon of up to 55 years, from a third-party payer perspective (only direct medical costs for the Colombian healthcare system) and applying discount rate of 3.5% both for costs and outcomes. Quality-adjusted life years (QALYs), taken from published literature, were used as a measure of effectiveness with a threshold of three times the per capita gross domestic product (GDP), approximately € 17,550. The comparison between analog and human insulin was performed separately for short and long term. The costs were in Colombian pesos (1 € = COP 2.660), and were built through base cases designed by interdisciplinary expert panels, with drug prices and costs of interventions or adverse events were estimated using official tariff manuals and databases. Univariate and probabilistic sensitivity analysis were performed. **RESULTS:** Despite certain clinical advantages, insulin analogues gain, on average, very few QALYs (from 0.02 to 0.1 depending on scenarios). With this result, the average ICER for short-term insulins would be € 78,900; while long duration insulin analogues have an ICER of € 94,550. Results were highly sensitive to price of medication, as well as to disutility or costs of hypoglycemic events. **CONCLUSIONS:** Given the assumptions and limitations of our model, insulin analogues would not be considered cost-effective within the Colombian healthcare system compared with multiple daily injections for adult patients with DM1.

PDB70
COST-EFFECTIVENESS OF PASIREOTIDE LONG-ACTING IN A TREATMENT OF ACROMEGALY IN FINLAND. ECONOMIC EVALUATION BASED ON FINNISH AURIA BIOBANK DATA ON HEALTH CARE RESOURCE UTILIZATION

Hahl J[1], Kurki S[2], Miettinen T[1], Snicker K[3]
[1]AT Medical Affairs Consulting Oy (Medaffcon), Espoo, Finland, [2]Auria Biobank, Turku University Hospital and University of Turku, Turku, Finland, [3]Novartis Finland Oy, Espoo, Finland

OBJECTIVES: The objective is to describe disease progression and treatment patterns of acromegaly in patients with inadequate biochemical control, assess how biochemical control will impact disease progression and treatment pathways and estimate the economic efficiency of pasireotide long-acting (PASI) in a treatment of acromegaly in Finland. PASI is compared to pegvisomant + somatostatin analoque (PEG+SSA) in patients with inadequately controlled acromegaly. **METHODS:** A 5-state Markov model describing the disease progression and management of acromegaly was constructed. The model enables an assessment of how biochemical control associated with PASI is translated into Quality Adjusted Life Years (QALYs), costs and subsequently incremental cost-effectiveness ratio. Transition probabilities were determined by clinical trial data (study 2402) in 6 month cycles. Achievement of control has an impact on quality of life, mortality risk and prevalence of comorbidities, whereas achievement of tumor reduction will have an impact on quality of life. Utilities for each health state were derived from the 2402 trial and the literature. The annual visit, monitoring and comorbidity costs were estimated by treatment response and were based on patient level data (n=66) from Auria biobank. The analysis was undertaken from health care payer perspective using 30-years time horizon. **RESULTS:** PASI dominated PEG+SSA treatment strategy. PASI was associated with more than 100,000€ lower costs compared to PEG+SSA. This is primarily driven by the lower pharmaceutical cost.PASI patients were on average 0.19 more years in biochemical control compared with PEG+SSA and was associated with QALY gain of 0.02. The difference in QALYs result from the tumor reduction achieved with PASI as well as the drop-out rate due to liver toxicities occurring in PEG+SSA strategy. **CONCLUSIONS:** PASI provides a valuable addition to the treatment options for patients with acromegaly and can achieve mortality as well as morbidity improvements in a cost-effective way in Finland.

PDB71
ECONOMICS ANALYSIS OF DAPAGLIFLOZIN COMPARE TO SULFONYLUREA IN THE TREATMENT OF TYPE 2 DIABETES MELLITUS IN SPAIN: COST OF ACHIEVING COMPOSITE ENDPOINTS

Capel M, Cordero L
Astrazeneca, Madrid, Spain

OBJECTIVES: Evaluate the cost analysis of fix dose combination of dapagliflozin plus metformin (DAPA+MET) compared with glipizide plus metformin (SU+MET), in the treatment of type 2 diabetes mellitus during one year. **METHODS:** A ran-