OBJECTIVES: Glucagon-like peptide-1 (GLP-1) receptor agonists are indicated to improve glycemic control in adults with Type 2 diabetes mellitus. The maximum daily licensed dosages in the UK are 20µg and 1.8mg for exenatide and liraglutide respectively. Compared to factors such as glycaemic control, cost is an important consideration when selecting treatments. The aim of this analysis was to describe the real-world daily usage and cost of exenatide BID and liraglutide in the UK setting.

METHODS: Data and study period: UK records between October 2008 and March 2011 from the IMS Dynamic Prescription database. This database captures data from 50% of pharmacies (45% national coverage) of actual prescriptions dispensed, linked to individual patients (anonymised). Inclusion criteria: patients who have filled a prescription for a GLP-1 receptor agonist at least twice during the study period, all key prescription fields are complete. The weighted average daily usage was calculated using the total volume of product dispensed and the number of patients filling prescriptions per month. Drug costs (British National Formulary 61, 2011) were applied to estimate average daily cost (ADC). Key assumptions: patients are not stockpiling or disposing of drug; each prescription equals one pack, patients are filling their prescriptions at the same pharmacy.

RESULTS: Data was available for a total number of unique patients of 19,200 and 12,690 for exenatide BID and liraglutide (data available from July 2009) respectively. The average daily usage during the investigated time period was estimated to be 20.49µg for exenatide and 1.51mg for liraglutide, with an estimated ADC of £2.53 and £3.29 respectively.

CONCLUSIONS: Based on the data described, GLP-1 receptor agonists are being dispensed in amounts within an acceptable range of the maximum daily licensed dosage. The ADC appears to be 30% higher for liraglutide with an estimated additional daily spend of £0.76.

PB335

ESTIMATING THE AVERAGE ANNUAL COST OF TREATMENT WITH INSULIN FOR PATIENTS WITH TYPE 2 DIABETES MELLITUS

Burden K1, Das Gupta R2, Hussein A2

1Roche Diagnostics, London, UK; 2Roche Diagnostics, Crawley, UK

OBJECTIVES: To estimate the average annual cost of treating patients with type 2 diabetes mellitus with insulin including: the cost of insulin, test strips for self-monitoring of blood glucose levels, and additional healthcare professional (HCP) time spent with patients following insulin initiation. The secondary objective was to describe insulin prescribing patterns in the UK.

METHODS: For insulin and test strip costs a retrospective analysis of 2019/2010 UK patient-level data was undertaken using Cegedim Strategic Data. Costs were applied using the BNF and MIMS. To estimate HCP costs 80% of HCP time was spent on HCPCmissions with insulin patients in the 3 years prior to and the 3 years post-insulin initiation. Costs were applied using PSRRU 2010. RESULTS: A projected 24.5 million insulin items were prescribed to 400,000 patients, generating an estimated average annual insulin cost of £959 per patient. Long-acting and biphasic insulins together accounted for more than 75% of the total volume and costs of insulin prescribed, intermediate acting insulins accounted for 6% and 4% of the volume and costs respectively. A projected 4.5 million packs of test strips were prescribed to 360,000 patients, generating an estimated average annual cost of test strips of £180 per patient. This makes insulin and test strips as HCPCmissions with insulin patients the 3 years post-insulin initiation, representing an absolute cost of £130 per patient.

CONCLUSIONS: Insulin initiation increases the cost of care not only because of the insulin itself, but also because of the package of resources that insulin requires. The estimated cost of insulin, insulin pens, needles and test strips is £609 per patient.

PB336

ECONOMIC EVALUATION OF RANIBIZUMAB IN THE TREATMENT OF VISUAL IMPAIRMENT DUE TO DIABETIC MACULAR EDEMA IN POLAND

Krenn C1, Schillhäuser V1, Walter F1, Gallagher M2, Knudsen MS3

1HEVA, Lyon, France; 2Pfizer, London, UK; 3Novartis Pharma AG, Basel, Switzerland

OBJECTIVES: Diabetic macular edema (DME) is an ophthalmological complication of diabetes that may lead to visual impairment and blindness if left untreated, and even despite treatment with the current standard of care, laser coagulation. Currently, an estimated 2% of diabetics suffer from DME with vision loss. The aim of the analysis was to evaluate the cost-effectiveness of ranibizumab in the con-

PB339

COST-EFFECTIVENESS OF SAXAGLIPTIN COMPARED TO SITAGLIPTIN FOR THE TREATMENT OF PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM)

Hutchings A1, Tolley K2, Aghan A3, Breton NI1, Lem轻微er M4, Osa OA5

1St Helens, UK; 2Tolley Health Economics, Buxton, UK; 3University of Leicester, UK; 4Bristol-Myers Squibb, Uxbridge, UK; 5University of Manchester, UK

OBJECTIVES: To estimate the cost-effectiveness of saxagliptin versus sitagliptin in treating patients with Type 2 Diabetes Mellitus (T2DM) in the UK. The study population was developed for the UK, France and Germany.

METHODS: The decision tree simulation was used to model the clinical and economic outcomes from saxagliptin versus sitagliptin for the treatment of T2DM. The two treatments have been investigated as an add-on to metformin in an 18-week, non-inferiority, RCT in 801 patients with T2DM who failed to achieve adequate glycaemic control on metformin alone. Results showed that the newer treatment, saxagliptin, was noninferior to sitagliptin, with a similar tolerability profile. Saxagliptin has a lower acquisition price, hence this analysis sought to assess cost effectiveness of saxagliptin + metformin versus sitagliptin + metformin using a cost utility analysis (CUA) framework from a UK healthcare perspective.

RESULTS: The CUA utilised a validated model using UK-UK-505 model inputs to estimate the micro/macromanagement of the case and mortality over a 40 year time horizon. Clinical parameters in the model included HbA1c levels for treatment effect, weight gain and incidence of hypoglycaemic adverse events. Parameter estimates were obtained from a mixed treatment comparison (MTC) of saxagliptin and sitagliptin, which included the head-to-head study. Saxagliptin treatment costs were based upon UK published list prices. Established costs and disposables associated with long-term diabetic outcomes were used, based upon a UKPDS sub study. Univaricete/probabalistic sensitivity analysis was conducted.

PB384

ECONOMIC ANALYSIS OF DIABETES TREATMENT GOALS DEFINED BY POLISH DIABETES ASSOCIATION: HOW MUCH DOES COST-EFFECTIVE TREATMENT COST?

Szymaro D1, Schubert A2, Kostrewska K3, Ryś P4, Skrzekowska-Baran P5

1Gdańsk, Poland; 2Gdańsk, Poland; 3Gdańsk, Poland; 4Gdańsk, Poland; 5Gdańsk, Poland

OBJECTIVES: Clinical guidelines for diabetes management issued by Polish Diabetes Association (PDA) describe therapeutic goals in patients with diabetes. The aim of this analysis was to determine additional costs that may be incurred for treatment following PDA recommendations (as compared with current treatment practice), so that the growth of treatment-related expenses would remain cost-effective in Polish setting.

METHODS: Two hypothetical patients were defined: John and Peter, whose clinical characteristics correspond to those of newly diagnosed patients with diabetes mellitus type 2 (DM2) in Poland. Diabetes progression was considered assuming that John is treated in line with current clinical practice and Peter is treated along with PDA recommendations (HbA1c, LDL, HDL, SBP are