

showed that at a willingness-to-pay threshold of €20,000 per QALY, the proposed treatment pathway had a 100% probability to be cost-effective. **CONCLUSIONS:** The proposed alternative treatment sequence was shown to be a cost-effective treatment option in patients inadequately controlled with metformin alone within established UK cost-effectiveness thresholds.

PDB74

COST-EFFECTIVENESS ANALYSIS OF LIRAGLUTIDE VERSUS SITAGLIPTIN OR EXENATIDE IN PATIENTS WITH INADEQUATELY CONTROLLED TYPE 2 DIABETES ON ORAL ANTIDIABETIC DRUGS IN GREECE

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OBJECTIVES: To evaluate the long-term cost-effectiveness of liraglutide versus sitagliptin or exenatide, added to oral antidiabetic drug mono- or combination therapy respectively, in patients with Type 2 diabetes in Greece. **METHODS:** The CORE Diabetes Model, a validated computer simulation model developed to determine the long-term health and economic outcomes of interventions in Type 2 diabetes, was adapted to the Greek health care setting. Patient and intervention effects data were gathered from a clinical trial comparing liraglutide 1.2mg once daily vs. sitagliptin 100mg once daily, both combined with metformin, and a clinical trial comparing liraglutide 1.8mg once daily vs. exenatide 10µg twice daily, both as add-on to metformin, glimepiride or both. Direct costs were reported in 2013 Euros and calculated based on published and local sources. All future outcomes were discounted at 3.5% per annum, and the analysis was conducted from the perspective of a third-party payer in Greece. **RESULTS:** Over a patient's lifetime, treatment with liraglutide 1.2mg vs. sitagliptin drove a mean increase in discounted life expectancy of 0.13 (SD 0.23) years and in discounted quality-adjusted life expectancy of 0.19 (0.16) quality-adjusted life years (QALYs), whereas therapy with liraglutide 1.8mg vs. exenatide yielded increases of 0.14 (0.23) years and 0.19 (0.16) QALYs respectively. As regards lifetime direct costs, liraglutide 1.2mg resulted in greater costs of €2797 (€1468) versus sitagliptin, and so did liraglutide 1.8mg compared with exenatide (€1302 [€1492]). Liraglutide 1.2 and 1.8mg doses were associated with incremental cost effectiveness ratios of €15101 and €6818 per QALY gained, respectively. **CONCLUSIONS:** Liraglutide is likely to be a cost-effective option for the treatment of Type 2 diabetes in a Greek setting.

PDB75

HEALTH ECONOMIC EVALUATION OF CANAGLIFLOZIN IN THE TREATMENT OF TYPE 2 DIABETES MELLITUS IN SLOVAKIA

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OBJECTIVES: Canagliflozin is a novel drug for treatment of diabetes belonging to the drug class known as sodium glucose co-transporter-2 (SGLT-2) inhibitors. To evaluate the cost-effectiveness of canagliflozin 100 mg in the Slovakian setting from a payer perspective when compared to sitagliptin in dual therapy (add-on to metformin), sitagliptin in triple therapy (add-on to metformin plus sulfonylurea) and dapagliflozin in combination with insulin (with or without metformin). **METHODS:** The IMS CORE Diabetes Model was used to evaluate the cost-effectiveness of canagliflozin versus comparators using Slovakia specific data, where available. **RESULTS:** The cost-effectiveness analyses indicated that canagliflozin 100 mg in dual therapy when compared with sitagliptin, was found to be cost-effective with an incremental cost-effectiveness ratio (ICER) of 14,930 € per QALY gained. In triple therapy when compared to sitagliptin, canagliflozin 100 mg was found to be cost-effective with an ICER of 5,251 € per QALY gained and in combination with insulin, canagliflozin 100 mg was a dominant alternative compared to dapagliflozin with a cost saving of 118 € per patient and higher QALYs. One-way sensitivity analyses revealed that in the majority of scenarios considered canagliflozin remained cost-effective in the dual therapy, triple therapy and add-on to insulin comparisons. **CONCLUSIONS:** Based on calculations performed using the CORE Diabetes model, canagliflozin 100 mg appear to represent a cost-effective option for the treatment of type 2 diabetes in Slovakia. Canagliflozin 100 mg was found to offer greater health benefits than currently available alternatives and to be a cost-effective treatment option when used in dual and triple therapy instead of sitagliptin or as an add-on to insulin instead of dapagliflozin.

PDB76

IS CANAGLIFLOZIN COST-EFFECTIVE COMPARED TO SITAGLIPTIN ACROSS MULTIPLE LINES OF TYPE 2 DIABETES MELLITUS (T2DM) THERAPY IN IRELAND?

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OBJECTIVES: Canagliflozin is a new oral agent for the treatment of T2DM that inhibits sodium-glucose co-transporter 2 (SGLT2), thereby leading to inhibition of glucose reabsorption and urinary glucose excretion which results in reductions in blood glucose, weight, and blood pressure. The purpose of this analysis was to evaluate the cost-effectiveness of canagliflozin vs. sitagliptin – a recommended and widely used dipeptidyl peptidase-4 inhibitor (DPP4) – in dual (with metformin), triple (with metformin + sulphonylurea) and add-on to basal insulin (with or without other anti-hyperglycaemic agents) therapy lines in Ireland. **METHODS:** The Economic and Health Outcomes Model of T2DM (ECHO-T2DM) [using updated UKPDS 82 mortality and risk equations] was used to simulate lifetime outcomes and costs of patients on either canagliflozin (100mg, titrated to 300mg as needed to maintain glycaemic control) or sitagliptin 100mg. Patient characteristics and treatment effects were sourced from head to head randomized clinical trials for dual and triple therapy. For the add-on to insulin therapy simulations, treatment effects were sourced from a network meta-analysis. Costs were localised and inflated to 2013 euros. Utilities

were sourced from the literature. Both costs and outcomes were discounted at 5%. **RESULTS:** Incremental costs, QALYs and ICERs for canagliflozin vs. sitagliptin were €1,360, 0.059 QALYs and €23,118 per QALY, respectively, in dual therapy; €108, 0.093 QALYs and €1,172 per QALY, respectively, in triple therapy; and €550, 0.068 QALYs and €8,047 per QALY, respectively, in add-on to insulin. In all three scenarios, canagliflozin was cost-effective using the acceptable willingness-to-pay threshold in Ireland. Sensitivity analyses suggest that these results are robust. **CONCLUSIONS:** These simulations suggest that the use of canagliflozin in patients in need of additional glycaemic control in dual, triple and add-on to insulin lines of therapy is a more efficient use of health care funds than the use of sitagliptin in the Irish setting.

PDB77

THE COST-EFFECTIVENESS OF CANAGLIFLOZIN VERSUS LIRAGLUTIDE IN PATIENTS WITH TYPE 2 DIABETES (T2DM) FAILING TO ACHIEVE GLYCAEMIC CONTROL ON METFORMIN MONOTHERAPY IN IRELAND

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OBJECTIVES: Canagliflozin is a novel oral agent for the treatment of T2DM that inhibits sodium-glucose co-transporter 2 (SGLT2), a mechanism that is complementary to other anti-hyperglycaemic drug classes, including insulin. SGLT2 inhibition leads to inhibition of glucose reabsorption and urinary glucose excretion, thereby reducing blood glucose, weight, and blood pressure. An economic (cost-effectiveness) evaluation of new technologies versus routine care is required prior to uptake in Ireland to ensure good value-for-money. This study evaluates the cost-effectiveness of canagliflozin compared to liraglutide – a currently reimbursed and routinely used glucagon-like peptide 1 (GLP-1) agonist – as dual therapy in combination with metformin from the payer perspective in the Irish health care setting. **METHODS:** The Economic and Health Outcomes Model of T2DM (ECHO-T2DM) [using updated UKPDS 82 mortality and risk equations] was used to simulate 40-year costs and outcomes associated with canagliflozin (100mg titrated to 300mg in patients requiring tighter glycaemic control) compared to liraglutide 1.2mg. Patient characteristics were sourced from canagliflozin RCTs in patients uncontrolled on metformin monotherapy and treatment effects were obtained from a network meta-analysis. The costs of treatments and outcomes were localised and inflated to 2013 values where possible. Utilities were sourced from the literature. Costs and outcomes were discounted at 5% annually. **RESULTS:** In the base case, canagliflozin was associated with incremental cost savings of €3,382 compared to liraglutide 1.2mg. It was also associated with a 0.022 more life years and 0.020 more quality adjusted life years (QALYs), suggesting that canagliflozin dominates liraglutide. Results were driven by lower acquisition costs for canagliflozin. Sensitivity analyses indicated that the dominance observed was robust. **CONCLUSIONS:** In these simulations, canagliflozin dominated liraglutide 1.2mg in dual therapy (add-on to metformin) in the Irish setting. These results suggest that canagliflozin represents good 'value for money' in treating these patients, compared to a routinely used GLP-1 agonist.

PDB78

HEALTH ECONOMIC EVALUATION OF CANAGLIFLOZIN IN THE TREATMENT OF TYPE 2 DIABETES MELLITUS IN NORWAY

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OBJECTIVES: Canagliflozin is a novel drug for treatment of diabetes belonging to the drug class known as sodium glucose co-transporter 2 (SGLT2) inhibitors. To evaluate the cost-effectiveness of canagliflozin in dual therapy (add-on to metformin) compared to sitagliptin and sulfonylurea (SU), in triple therapy (add on to metformin and SU) compared to sitagliptin and as add-on to insulin versus placebo. **METHODS:** The IMS CORE Diabetes Model was used to evaluate the cost-effectiveness of canagliflozin (using a weighted average of 80/20 for the 100 mg and 300 mg dosage, respectively) versus the aforementioned comparators using Norwegian-specific data, where available. **RESULTS:** In dual therapy, as add-on to metformin versus sitagliptin, canagliflozin appears to dominate sitagliptin with average cost savings of 606 NOK and an average QALY gain of 0.030 and as add on to metformin canagliflozin is cost-effective versus SU, with an incremental cost-effectiveness ratio (ICER) of 79,309 NOK and an incremental cost of 5,757.80 NOK and an average QALY gain of 0.0726. As add on to insulin canagliflozin appears to dominate placebo with an incremental cost saving of 13,506 NOK and an incremental QALY of 0.080. In triple therapy as add on to metformin and SU canagliflozin appears to dominate sitagliptin with average cost savings of 556 NOK and an average QALY gain of 0.021. **CONCLUSIONS:** Canagliflozin is associated with cost savings and QALY gain compared to sitagliptin in dual therapy as add-on to metformin, and in triple therapy as add on to metformin and SU. Canagliflozin will be a cost-effective alternative to SU in dual therapy as add on to metformin. Adding canagliflozin to insulin will be cost-effective compared with placebo i. e. it is cost-effective to add canagliflozin treatment rather than not.

PDB79

HEALTH-ECONOMIC COMPARISON OF SENSOR-AUGMENTED PUMP WITH LOW GLUCOSE SUSPEND VERSUS INSULIN PUMP ALONE FOR THE TREATMENT OF HYPO-PRONE TYPE 1 DIABETES IN SLOVAKIA

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OBJECTIVES: To project the long-term costs and outcomes of sensor-augmented pump (SAP) with low glucose suspend (LGS) versus insulin pump alone (CSII) for the treatment of hypo-prone Type 1 diabetes in Slovakia. **METHODS:** The CORE Diabetes Model is a peer-reviewed, validated model, which employs standard