cost-effectiveness ratio below the WTP threshold in Spain; QALY gains were 0.060.

CANA 300 mg is cost-effective compared to SITA in dual and triple therapy, with an estimated quality-adjusted life year (QALY) gains of 0.027 and 0.057, respectively. (PDB55 using CANA versus SITA as an add-on to dual therapy was consistent across a number of scenarios).

Changes are important drivers in cost-effectiveness assessments of agents with new mechanisms of action. 300 mg of CANA was consistently cost-effective compared to SITA in dual and triple therapy, with a cost per quality-adjusted life year (QALY) of $4,500.

The NMBs for the comparison of CANA versus SITA varied from $4,500 to $29,032, with the highest cost-effectiveness for CANA 300 mg versus SITA in dual therapy. However, over lifetime, metformin had the highest spending, most attributed to managing diabetic complications. Sensitivity analyses demonstrated the most cost-effectiveness of metformin 250 mg use in dual therapy, with a cost per QALY of $2,889 vs. $3,970. CONCLUSIONS: These results illustrate that, due to higher effectiveness, metformin 300 mg/day is associated with better cost-effectiveness results than sitagliptin 100 mg/day after 26 and 52 weeks. Moreover, switching patients from sitagliptin after 52 weeks to liraglutide might result in a clinical benefit that may lower the cost per controlled patient with respect to 78 weeks of continued sitagliptin treatment.

PD57

THE EFFECT OF TREATMENT INTENSIFICATION ASSUMPTIONS ON ESTIMATES OF COST-EFFECTIVENESS IN TYPE 2 DIABETES MELLITUS (T2DM)

Willis M1, Johansen P2, Nesslau C2

1The Swedish Institute for Health Economics, Lund, Sweden, 2Janssen Global Services, LLC, Raritan, NJ, USA

OBJECTIVES: T2DM is a chronic, progressive disease and proper economic evaluation of alternative treatment interventions requires economic modeling over long time horizons. As currently available treatments cannot halt disease progression, most patients eventually require therapy intensification to meet HbA1c goals. This analysis explores the impact of commonly used intensification assumptions on cost-effectiveness estimates using the REALM (Real-world Economic Evaluation Model) and the ECHO-T2DM model.

RESULTS: These models were used to evaluate the cost-effectiveness of using liraglutide versus sitagliptin with metformin as add-on to metformin for patients who had previously been treated with liraglutide or sitagliptin alone. The results showed that treatment with liraglutide resulted in a lower cost per controlled patient with better health outcomes. However, the results were sensitive to the assumptions made about the timing and intensity of treatment intensification.

PD55

THE COST-EFFECTIVENESS OF CANAGLIFLOZIN (CANA) VERSUS SITAGLITIN (SITA) AS AN ADD-ON TO METFORMIN OR METFORMIN PLUS SULOPHYLONEXA IN THE TREATMENT OF TYPE 2 DIABETES MELLITUS IN SPAIN

Nielsen AT1, Pitcher A2, Lovato E1, Schubert A1, Hemels M1, Nesslau C1, Gonzalez B1, Janssen-Cilag A/S, Birkerød, Denmark, 2JMS Health, London, UK, 3Janssen-Cilag Poland, Warszaw, Poland, 4Janssen Global Services, LLC, Raritan, NJ, USA, 5Janssen-Cilag Spain, Madrid, Spain

OBJECTIVES: CANA, an agent that inhibits sodium glucose co-transporter 2, decreases glucose levels by lowering the renal threshold for glucose excretion, thereby resulting in an increase in urinary glucose excretion (UGE). This increase in UGE reduces weight, as well as systolic blood pressure (SBP). In contrast, dipeptidyl peptidase-4 inhibitors such as SITA lower glucose but are not associated with weight loss or a reduction in SBP. The objective of this analysis was to evaluate the cost-effectiveness of CANA 100 and 300 mg versus SITA 100 mg in dual therapy and triple therapy as an add-on to metformin, and as an add-on to metformin plus sulphonylurea, respectively, from the Spanish National Health System perspective.

METHODS: The IMS CORE Diabetes Model was used to evaluate the cost-effectiveness of CANA 100 and 300 mg versus SITA using Spanish-specific utilities and cost data. Direct costs were reported in euros and an annual discount rate of 3% was applied on costs and effects. The time horizon used for the economic evaluation was 10 years. The impact of parameters related to efficacy, cost, and safety were assessed by performing one-way sensitivity analyses.

RESULTS: The results suggest that CANA 100 mg dominates SITA in dual therapy and in triple therapy, with estimated quality-adjusted life year (QALY) gains of 0.027 and 0.057, respectively. CANA 300 mg is cost-effective compared to SITA in dual and triple therapy, with a cost per QALY of $2,889 vs. $3,970. The NMBs for the comparison of CANA versus SITA varied from $4,500 to $29,032.

CONCLUSIONS: These results suggest that adding CANA 100 mg or 300 mg instead of SITA in patients inadequately controlled on metformin or metformin plus sulphonylureas would result in more efficient use of healthcare resources in the Spanish setting.

PD56A

THE EFFECTIVENESS OF CANAGLIFLOZIN (CANA) VERSUS SASSAXAGLITPIN (SAXA) AMONG OLDER INDIVIDUALS LIVING WITH TYPE 2 DIABETES MELLITUS (T2DM) IN CANADA

Teschmacher AR, Nesslau C1, Sabapathy S2, Yoong K1, Johansen P2, Willis M1

1Janssen Global Services, LLC, Raritan, NJ, USA, 2Janssen-Cilag Spain, Madrid, Spain

OBJECTIVES: People aged ≥65 years with T2DM contribute significantly to the increasing rate of health care utilization. CANA, an agent that inhibits sodium glucose co-transporter 2 (SGLT2), and SAXA, a dipeptidyl peptidase-4 inhibitor, have provided meaningful HbA1c reductions when used as monotherapy and as add-on to other older patients. The objective of this analysis was to determine the cost-effectiveness of CANA 100 or 300 mg versus SAXA 5 mg in patients with T2DM aged ≥65 years in the Canadian setting.

METHODS: ECHO-T2DM was used to evaluate the cost-effectiveness of CANA versus SAXA among older patients with T2DM, aged ≥65 years, for up to 5 years of treatment. The models were used to estimate a range of outcomes and costs associated with using CANA 100 or 300 mg versus GLIM as add-on to metformin. Patient characteristics, treatment effects, and adverse event rates were sourced from a comparison of the two treatments.

RESULTS: The results suggests that CANA 100 mg is more cost-effective than SAXA in the treatment of T2DM in older patients. However, the results were sensitive to the assumptions made about the timing and intensity of treatment intensification.