OBJECTIVES: To evaluate the long-term cost-effectiveness of dapagliflozin versus a sulphonylurea (SU) or a dipeptidyl-peptidase-IV (DPP-4) inhibitor, when added to metformin in T2DM patients who have achieved inadequate blood glucose control with metformin in SWEDEN. METHODS: The published and validated CARDIFF diabetes model, a lifetime micro-simulation model, was adapted to the Greek health care setting. The model captured, on an individual level, the occurrence of micro- and macro-vascular complications, and diabetes-specific and all-cause mortality. Clinical inputs were derived from a 52-week randomized clinical trial and a network meta-analysis comparing dapagliflozin with SU and DPP-4 inhibitor, respectively, in combination with metformin. Local drug costs and utility data were retrieved from literature and assigned to model parameters to calculate total quality-adjusted life years (QALYs) and total costs as well as incremental cost-effectiveness ratios (ICERs). The analysis was conducted from a third-party payer perspective in Sweden. Sensitivity analyses were performed.

RESULTS: Over a patient’s lifetime, dapagliflozin was associated with a QALY gain of 0.034 (95% CI: 0.030–0.039) and an increased cost of €1,149 (95% CI: €1,144–€1,154). Incremental QALYs compared with SU and DPP-4 inhibitor, respectively, at additional costs of €5,149 (95% CI: €5,062–€5,237) and €7,755 (95% CI: €6,636–€8,747), respectively. These findings were mainly driven by the beneficial effect of dapagliflozin on weight, and its higher drug acquisition costs. The corresponding ICERs were €10,545 and €17,727 per QALY gained. A scenario analysis was performed.

CONCLUSIONS: Dapagliflozin in combination with metformin was shown to be a cost-effective treatment alternative for patients with T2DM whose metformin regimen does not provide sufficient glycemic control in the current Greek health care setting.
policy making. METHODS: A published decision-analysis tool (the GeboForCTM) was employed to assess cost-effectiveness of GDM screening by comparing costs and averted disability-adjusted life years (DALYs) with no GDM screening. As modeling inputs, costs for GDM screening and antenatal care, incidence and cost of GDM perinatal adverse effects (PAE) were based on an investigation on 6 tertiary hospitals from different cities in China as part of this analysis. Cost for postpartum care was calculated based on literature and adjusted for China. PAE-DALYs, lifetime cost for postpartum T2DM, and effectiveness of interventions were collected from literature. Annual discount rate was 3.0%. Sensitivity analysis was conducted on some key indicators. RESULTS: The total costs of GDM screening, intervention and life-time treatment per 1000 pregnant women were $7,092,398 in GDM screening group, saving $1,129,671 compared with no GDM screening. 277 4 DALYs were averted in screening group, which was mainly brought by averted postpartum care for T2DM prevention. Sensitivity analyses demonstrated robustness of the results. CONCLUSIONS: GDM screening and interventions are cost-saving in an urban population settings validated through the results obtained from T2DM prevention, China should pay more attention to providing postpartum care for GDM women in the future.

**PDB61**

**OBJECTIVES:** Improving glycemic control is the primary goal of T2DM management and can help to reduce the risk of micro- and macrovascular complications. Guidelines from the American Diabetes Association and European Association for the Study of Diabetes recommend lowering HbA1c levels to <7.0% regularly. This analysis compared the cost of reaching this target (HbA1c <7.0%) using canagliflozin versus dapagliflozin, two compounds that inhibit sodium glucose co-transporter 2 (SGLT2) as add-on therapy from the payer perspective in the UAE. METHODS: A Bayesian network meta-analysis (NMA) was conducted to compare the efficacy of canagliflozin 100 and 300 mg versus dapagliflozin 10 mg in terms of the percentage of patients that achieved the HbA1c goal of <7.0% at 26 weeks. Based on the NMA results and the acquisition cost of dapagliflozin in the UAE ($1.77 per day), we calculated what the daily acquisition cost of each dose of canagliflozin would be if the costs of a patient reaching the target with canagliflozin 100 and 300 mg were equalized to the cost of reaching the target with dapagliflozin 10 mg. RESULTS: In dual therapy as add-on to metformin, patients using canagliflozin 100 and 300 mg were more likely to achieve HbA1c <7.0% compared to those using dapagliflozin 10 mg, with odds ratios of 1.3 (95% CI 1.9-8.1) and 1.7 (95% CI 9.0-34.8) respectively. The cost of canagliflozin 100 and 300 mg that equalized the cost of reaching HbA1c <7.0% with dapagliflozin 10 mg were $2.11 and $2.45 per day, respectively. CONCLUSIONS: These results suggest that adding canagliflozin 100 or 300 mg instead of dapagliflozin 10 mg in patients inadequately controlled to <7.0% for most patients.

**PDB62**

**OBJECTIVES:** This study aimed to provide a cost to GDM intervention to patients in Greece achieving their pre-defined glycemic targets. When treatment with metformin (MF) fails to control T2DM patients, add-on therapies are needed. Sitaglitin is indicated as second-line therapy in Greece, after treatment with MF has failed and is a valid option in the proposed national therapeutic protocols. The cost-effectiveness of second-line therapies was estimated using Sitaglitin in MF vs adding sulphonylureas (SU) to MF for the treatment of T2DM patients with inadequate glycometric control. METHODS: A published individual-level simulation model was developed to predefine medical cost, diabetic complications, drug-related adverse events, life expectancy and quality adjusted life years (QALYs) associated with Sitaglitin add-on therapy versus SU add-on therapy. The model was developed based upon the UKPDS 68 risk equations to project long-term complications which were mapped and safety profiles of drugs were obtained from a head-to-head trial. Costs (€ 2014 prices) and effects were discounted at 3.5% annually. Results: Sitaglitin strategy is projected to cost 359 EUR more than SU strategy per patient over lifetime. Sitaglitin showed reductions in diabetes-related complications and adverse events. The incremental QALY for Sitaglitin strategy is 0.042, primarily due to improvements associated with hypoglycemia, body weight change, and MI. The incremental cost-effectiveness ratio (ICER) is €5,852 per QALY gained. Sensitivity analysis conducted varied multiple parameters. ICER ranges from 4,873 to 12,173 €/QALY gained. The results are robust and never exceeded the 30,000/€QALY threshold. CONCLUSIONS: Sitaglitin add-on strategy could be cost-effective, compared to SU, for the Greek healthcare setting. Furthermore, it remains cost-effective in all types of sensitivity analysis.

**PDB64**

**OBJECTIVES:** to assess the cost effectiveness of saxagliptin (SAXA) vs sitagliptin (SITA) or vilaglipin (VILDA) as add-on therapy to metformin (MET) in patients with type 2 diabetes and inadequate glycemic control, with metformin alone. METHODS: The Cardiff Diabetes Model was adapted to the Russian health-care setting. We modeled events, efficacy, total costs for managing patients with T2DM: 1-st line – monotherapy metformin alone, 2-nd line (target group) – SAXA or SITA or VILDA plus metformin, 3-rd line – insulin rescue therapy. The model simulated the disease progression and treatment effects for 40 years (8-26 years for 1-2-3 lines respectively). The effectiveness measure was quality-adjusted life years (QALYs). Sensitivity analysis was performed on 17 parameters. Analysis based on Greek payer perspective. RESULTS: Saxagliptin, compared to other SGLT2 inhibitors, was cost-effective in all types of sensitivity analysis.