Rosenstock study and other two RCTs compared Glargine to Detemir showed Glargine and Detemir does not have difference in HbA1c control and hypoglycemia rate for the patient with type 2 diabetes. Based on the Rosenstock study, cost-minimization study was performed. Mean daily detemir dose was higher (0.78 U/kg [0.32 with once daily, 1.12 with twice daily dosing]) than glargine (0.44 U/kg). The direct cost was estimated from the perspective of the health insurance in China. The time horizon was one year of treatment. The price was referred to Price in 2008. The currency is Yuan. The cost of insulin medication (glargine or detemir) and consumables (needles, blood glucose test strip) was collected as the direct cost. No sensitivity analysis on resource use and unit costs around base case parameter values was performed to test the robustness of the base case results RESULTS: Insulin glargine was associated with 40.77% ($894.95RMB per year)cost saving compared to detemir which had an equivalent level of metabolic control, although the price of detemir is lower in China. Univariable sensitivity analysis on resource use and price has been performed and confirmed the robustness of the results in favour of insulin glargine in China. The current study findings are consistent with the direction (magnitude of cost-saving reported in Spain, Hungary, Argentina, Germany and UK). CONCLUSIONS: Insulin glargine was cost saving compared to insulin detemir in China. The information is important for health care providers who are considering the total budget for the type 2 DM patient with basal insulin.

OBJECTIVES: To determine the cost-effectiveness ratio of adding saxagliptin to metformin therapy (SAXA+MET) compared to adding sulfonylureas (SULF+MET), in patients with type 2 diabetes mellitus (DM2) who have failed to achieve adequate glycemic control with metformin. METHODS: A discrete event simulation model (Cardiff Long term cost-utility model) based on UKPDS 68 with a fixed time increase was used to simulate disease progression and to obtain an estimate of the treatment’s economic and health consequences in DM2 patients. The clinical efficacy parameters for saxagliptin were obtained from the literature; drug acquisition costs, adverse effects (AEs) and microvascular and macrovascular complications were taken into account. Costs were expressed in United States dollars (2009), with an annual 3.5% discount. The time horizon was 20 years. RESULTS: A lower number of non-fatal events was found for the SAXA+MET -treated group versus the SULF+MET -treated group. Additionally, the model predicted a lower number of fatal events to macrovascular (146 vs. 151) and microvascular (17.7 vs. 17.9) events for the SAXA+MET-treatment group vs. the SULF+MET-treated group. The total cost of the SAXA+MET cohort was 14% higher than that of the SULF+MET cohort. Treatment with SAXA+MET resulted in a higher number of QALYs (9.992 vs. 9.172) and LYs (20,898 vs. 20,797) than treatment with SULF+MET; the additional cost per QALY and LY gained was $US6,691 and US 14,636 respectively. CONCLUSIONS: Considering the GDP per capita in Argentina, results suggest that the addition of saxagliptin to metformin therapy compared to the addition of sulfonylureas would yield a discounted net health benefit (Optimisation of Pharmacotherapy Model with a Long-Term horizon) when considering the GDP per capita in Argentina, results suggest that the addition of saxagliptin to metformin therapy compared to the addition of sulfonylureas would yield a discounted net health benefit (Optimisation of Pharmacotherapy Model with a Long-Term horizon).

RESULTS: Twenty-hundred and five completed responses were obtained from 354 individuals who satisfied inclusion and exclusion criteria, for a response rate of 59.8%. The sample was 50% Caucasian, 50% African-American, 63% female and 72% had annual household income of less than $25,000. A majority (56%) reported ideas about how this impact is mediated by respondents’ social isolation and psychological distress. Alternative IVs for adjusting endogeneity bias of pain severity are worth exploring.