in the A1cheive study. **METHODS:** The CORE Diabetes Model was used to make long-term projections of clinical and cost outcomes associated with a 1% HbA1c reduction based on A1chieve, a global, prospective, observational study of basal, mealtime and biphasic insulin analogs in routine clinical practice. At baseline, mean (SD) patient age was 60 (10) years, duration of diabetes 12 (5) years and HbA1c 9.2 (1.8)%. HbA1c was reduced by 1%-point from baseline in the active group relative to the control group. Life expectancy, complication rates and the cost of complications were projected of a 35-year time horizon. Future costs and clinical outcomes were discounted at 3% annually. Costs are presented in 2011 Algerian Dinar (DZD), converted to Euros (EUR) at an exchange rate of DZD 1:EUR 0.096. **RESULTS:** A 1% reduction in HbA1c was associated with improvements in both clinical and economic outcomes. Undiscounted life expectancy was improved by 0.17 year with a 1% improvement in HbA1c (6.58 versus 6.40 years). The cumulative incidence of all diabetes related complications included in the analysis was lower in the 1% HbA1c reduction group. Complication costs were DZD 9,669 (EUR 93) lower following HbA1c reduction (DZD 387,236 [EUR 3,717] versus DZD 396,905 [EUR 3810]). The most pronounced difference was in the cost of renal complications. **CONCLUSIONS:** Glycemic control in A1chieve patients was generally suboptimal in the Algerian setting. Improvements in glycemic control are likely to lead to substantial clinical and economic benefits due to reduced complication rates. Consequently, the cost-effectiveness of intensifying treatment in these patients is worthy of further analysis.

PDB42
EVALUATING THE CLINICAL AND COST OUTCOMES ASSOCIATED WITH IMPROVING GLYCEMIC CONTROL IN TYPE 2 DIABETES PATIENTS IN INDIA

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OBJECTIVES: Diabetes represents a huge health care challenge for India. Estimates suggest that there are over 61 million people living with diabetes in India (prevalence of 9.2% in adults), and diabetes caused approximately 983,000 deaths in 2011. The aim of this study was to evaluate the benefits in long-term clinical and cost outcomes associated with improving glycemic control in type 2 diabetes patients in India. **METHODS:** Cohort characteristics were based on Indian patients in A1chieve, a global, observational, prospective study of insulin analogs in daily clinical practice. At baseline, patients had a mean (standard deviation) age of 51.8 (10.1) years, duration of diabetes of 6 (4.6) years and glycated hemoglobin (HbA1c) of 8.3% (1.4%). A published and validated model of type 2 diabetes (CORE Diabetes Model) was used to make long-term projections of clinical outcomes and direct costs (2011 Indian Rupees [INR], converted to Euros [EUR] at INR 0.015=EUR 1). Future costs and clinical benefits were discounted at 3% annually. **RESULTS:** Over a 35-year time horizon, reducing HbA1c by 1% was projected to improve mean life expectancy by 0.64 years (10.95 versus 11.59 years) and quality-adjusted life expectancy by 0.53 QALYs (7.36 versus 7.89 QALYs). Benefits were driven by lower complication rates with improved glycemic control. End-stage complications such as myocardial infarction, end-stage renal disease, severe vision loss and lower limb amputation were reduced by 4%, 46%, 33% and 3%, respectively (relative risk). Direct costs were reduced by INR 33,443 (EUR 502) due to complications avoided control (INR 256,101 [EUR 3,842] versus INR 222,659 [EUR 3,340]). **CONCLUSIONS:** HbA1c levels are above guideline targets in India. Improving glycemic control is likely to substantially lower the risk of complications, improve survival and reduce complication costs. Cost-effectiveness analyses of interventions/management programs designed to improve glycemic control are merited for the Indian setting.

PDB43
ECONOMIC EVALUATION OF VILDAGLIPTIN COMPARED TO GLIMEPIRIDE AS ADD-ON TO METFORMIN FOR THE TREATMENT OF DIABETES MELLITUS TYPE 2 PATIENTS IN GREECE

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OBJECTIVES: Evaluate the cost-utility (CUA) of vildagliptin or sulphonylurea as add on to metformin treatment for DMII patients for the Greek NHS **METHODS:** A validated patient level simulation model was used based on UKPDS risk equations (Clarke 2004) to estimate long run micro/macro-vascular complications and mortality over a lifetime horizon. During each cycle a patient can experience different complications: ischemic heart disease, myocardial infarction (MI), chronic heart failure, renal failure, stroke, amputation, blindness in one eye. The outcomes assessment criteria were Quality Adjusted Life Years (QALYs) and Life Years Gained (LYG). Quality of life decrements were derived from literature. Discount rates of 3.5% were set for both costs and outcomes and univariate sensitive analysis was conducted. Drug costs were based on Greek published list prices 2012, while complication cost was obtained from International literature. **RESULTS:** The mean number of QALYs per patient in the lifetime horizon was 6.24 in the vildagliptin&metformin group and 6.16 in sulphonylurea&metformin group, resulting in 0.08 QALYs in favor of vildagliptin&metformin group. Total costs per patient were €7,848 in vildagliptin&metformin group and €7,572 for sulphonylurea&metformin, resulting in €276 cost difference for the latter. The incremental cost effectiveness ratio (ICER) for vildagliptin&metformin versus sulphonylurea&metformin is estimated at €3.371 per QALY for a lifetime horizon. Regarding the analysis on life years gained, vildagliptin&metformin group had on average 8,01 LYG and sulphonylurea&metformin 7,93, leading to a difference of 0.08 years in favour of vildagliptin&metformin. ICER for vildagliptin&metformin versus sulphonylurea&metformin is estimated at €3.424 per life years gained.

CONCLUSIONS: For the Greek NHS adding Vildagliptin to Metformin is projected to be highly cost-effective for patients with type 2 diabetes who are not at HbA1C goal on Metformin compared to adding SU to Metformin. The price difference of the two comparators is bridged when complications' cost is included in the analysis.

PDB44
LONG-TERM EVALUATION OF THE ECONOMIC IMPACT OF REDUCING HBA1C BY 1% IN TYPE 2 DIABETES PATIENTS IN MEXICO

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OBJECTIVES: Achieving glycemic control forms the cornerstone of type 2 diabetes management and is key in reducing diabetes-related complications. The aim of the current analysis was to investigate the long-term clinical and economic benefits of a 1% reduction in HbA1c in comparison with baseline levels for type 2 diabetes patients enrolled in the A1chieve study (an international, prospective, observational study of insulin analogs within routine clinical practice) in the Mexican setting. **METHODS:** The analysis was performed using the published and validated CORE Diabetes Model, over a 35-year time horizon, with future costs and clinical outcomes discounted at a rate of 3% per annum. At baseline, mean (SD) patient age was 55(13) years, duration of diabetes 11(7.5) years and HbA1c 10.3(2.2)%. An HbA1c reduction of 1% was applied in the active arm, after which it was assumed that HbA1c remained constant. Captured costs included diabetes-related complications and concomitant medications. Costs of antihyperglycemic treatment and adverse events were not included. Costs are presented in 2011 Mexican Pesos (MXN) and converted into Euros (EUR) (MXN 1 to EUR 0.058). **RESULTS:** A 1% reduction in HbA1c was associated with increased life expectancy of 0.51 years (8.70 years versus 8.19 years) and reduced cumulative incidence of all modelled diabetes-related complications. Total mean direct costs were MXN 41,875 (EUR 2,429) lower in patients with HbA1c of 9.3% versus those with HbA1c remaining at 10.3% (MXN 596,985 [EUR 34,625] versus MXN 638,860 [EUR 37,054]). This was driven by savings from the reduced incidence of complications. **CONCLUSIONS:** Baseline glycemic control in A1chieve type 2 diabetes patients in the Mexican setting was generally poor. Even modest improvements in HbA1c are likely to lead to substantial clinical and economic benefits, due to reduced complication rates. Consequently, the cost-effectiveness of intensifying treatment is worthy of further analyses.

PDB45
COST-EFFECTIVENESS OF VILDAGLIPTIN COMPARED TO GENERIC SULPHONYLUREAS ADDED ON TO METFORMIN FROM THE PORTUGUESE SOCIETAL PERSPECTIVE

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OBJECTIVES: Vildagliptin has demonstrated efficacy on HbA1c comparable to glimepiride after 2 years of add-on treatment to metformin with markedly reduced hypoglycemic risk. The current analysis aims to assess the add-on of vildagliptin versus generic sulphonylureas (SUs) to metformin using a cost-effectiveness analysis (CEA) framework from the Portuguese societal perspective. Whilst generic SUs have a lower acquisition price, hypoglycemic events represent a significant economic burden and therefore the CEA framework can contribute to better decision-making. **METHODS:** The CEA utilized a patient level simulation model building on the UKPDS risk equations to estimate micro/macro-vascular complications and mortality over a lifetime horizon. Clinical parameters in the current model include: HbA1c levels, weight gain, systolic blood pressure, total cholesterol, HDL and incidence of hypoglycemic events. Patient distribution on demographic and clinical variables was based on Portuguese epidemiological data. The treatment algorithm allows for treatment switch when: HbA1c goal is not met; drug intolerance; poor compliance. Drug parameters and quality of life decrements were derived from literature. Drug costs were based on Portuguese list prices, while the unit cost of each complication was obtained from the Diagnosis Related Groups tariff. **RESULTS:** On average, the add-on of vildagliptin was estimated to result in a per patient gain of 0.11 QALY and an increase of €1,453 on total cost when compared to the add-on of SU to metformin, resulting in an incremental cost-effectiveness ratio of €12,794/QALY. **CONCLUSIONS:** Under the Portuguese societal perspective, adding vildagliptin is projected to be likely cost-effective for patients with type 2 diabetes who are not at HbA1c goal on metformin compared with adding generic SUs.

PDB46
ANTI-DIABETIC DRUGS AND IN-PATIENT ADMISSIONS ATTRIBUTABLE TO DIABETES IN PORTUGAL

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OBJECTIVES: Despite the growing incidence of diabetes, the occurrence of complications requiring hospitalization has stabilized in the last decade. Advances in health care and improved access to innovative drugs may have led to these health gains. We aimed to explore the relationship between patients' access to newer oral anti-diabetic drugs (OADs) and the number and costs of hospitalizations attributable to diabetes. **METHODS:** For the period 2000-2009, we collected data on: 1) the number of hospital admissions and their costs attributable to diabetes; 2) the number of patients treated for diabetes per year and health region, based on the OADs consumption ("treated prevalence"); and 3) the evolution of the average "vintage"