# Abstracts

litus (T1DM and T2DM,). Prescriptions were costed at UK £2006 prices from government sources for: insulin, oral hypoglycaemic agents (OHAs), glucose monitoring, sharps and delivery devices and hypoglycaemia rescue medication. RESULTS: In T1DM, 268 and 625 patients were initiated on detemir and glargine respectively, contributing 80 patient years and 282 patient years of treatment. In T2DM, 334 and 977 patients were initiated respectively, contributing 108 patient years and 384 patient years. In T1DM, the mean total annual cost of diabetesrelated prescriptions was £1518 vs. £1312 ( $\Delta = 14\%$ , p < 0.001) for detemir and glargine respectively, and £1592 vs. £1113 ( $\Delta =$ 30%, p < 0.001) in T2DM. The difference in spending for T1DM and T2DM for detemir with reference to glargine was as follows: insulin +21% and +37%; OHAs (T2DM only) -24%; glucose monitoring -1% and 20% and rescue medication +7% and 0%. CONCLUSIONS: Patients managed with glargine as their basal insulin generate significantly lower prescription costs than those managed with detemir which translated into a less costly regimen for both T1DM and T2DM.

## PREVENTION WITH PICOTAMIDE AND ASPIRIN IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AND PERIPHERAL ARTERIAL DISEASE: A PHARMACOECONOMIC EVALUATION lannazzo S<sup>1</sup>, Pradelli L<sup>1</sup>, Eandi M<sup>2</sup>

PDB5

Advanced Research Srl, Turin, Italy, <sup>2</sup>Università di Torino, Turin, Italy Type 2 diabetes mellitus (DM) and peripheral arterial disease (PAD) are two very relevant cardiovascular (CV) risk factors, which can often be found concurrently in the same patient. The DAVID trial, a double-blind, randomized, aspirin(ASA)controlled study, has demonstrated that the use of picotamide, a thromboxane A2 synthase and receptor dual inhibitor, is associated with lesser CV morbidity and mortality in this type of patients in comparison to ASA, considered the standard antiplatelet agent. OBJECTIVES: To estimate clinical and economic impacts of picotamide in the Italian health care setting. METHODS: We developed a Markov model based on clinical data from DAVID and national economic parameters and demographics. RESULTS: The base case scenario, which reflects current prices and reimbursement policy (i.e. ASA fully paid for, picotamide out-of-pocket for patients) yielded an incremental cost/effectiveness ratio (ICER) of about 8500 euro/year of life (YOL) saved, which falls below conventionally adopted willingness to pay thresholds. This cost, however, is totally born by the patient, while the savings on health care expenditures for avoided events (and less ASA) benefit the National Health Service (NHS). These results may help the physician in explaining the consequences of this choice to his/her patients, facilitating a fully-informed choice. The availability of a theoretical model allowed to explore some alternative scenarios, that indicate that the ICER can be further lowered and the economical burden better distributed through policy changes. CONCLU-SIONS: The pharmacoeconomic model indicated that picotamide is likely to be a cost/effective option for CV mortality and morbidity prevention in patients with concurrent type 2 DM and PAD and that the level of adoption of this strategy will depend on willingness to pay and policy priorities of the NHS and patients themselves.

A225

PDB6

### COST-EFFECTIVENESS OF THE ONE-TOUCH® ULTRASMART® BLOOD GLUCOSE METER COMPARED WITH A CONVENTIONAL METER FOR INSULIN-USING DIABETES PATIENTS FROM THE USA

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METHODS: A 20-week prospective randomized controlled trial (RCT), followed by an observational visit (OV) (26-65 weeks later), using two SMBG methods was undertaken to compare an integrated glucose meter and electronic logbook (IGMEL) with conventional meters and paper logbooks (CMPL) in controlling HbA1c levels. RESULTS: The RCT demonstrated that IGMEL patients experienced an HbA<sub>1c</sub> reduction of 0.61% compared with 0.40% for CMPL patients (p = 0.03). The HbA<sub>1c</sub> reduction was coupled with a slight increase in hypoglycemia for IGMEL (0.21 events/day) compared with CMPL (0.14 events/day), but a slight increase in monitoring (4.0 vs. 3.5 times/day). At the OV, those that chose to remain on IGMEL maintained an HbA<sub>1c</sub> reduction of 0.5% while those that chose to stay on CMPL increased HbA1c by 0.2% compared to baseline. These results were input into a peer-reviewed, validated, economic model projecting these improvements in HbA<sub>1c</sub> and hypoglycemia rates over a patient's lifetime. Transition probabilities, treatment and complication costs came from published studies. Costs and clinical outcomes were both discounted at 3% annually. IGMEL was cost-saving compared with CMPL and improved life expectancy (0.167 and 0.536 years) and quality-adjusted life expectancy (0.124 and 0.414 years), based on RCT and OV, respectively. IGMEL was no longer cost saving when the regimen costs \$122/year and \$198/year more than CMPL based on RCT and OV, respectively. IGMEL remained below \$50,000/LE when the IGMEL regimen was up to \$597/year and \$1729/year more expensive than CMPL, based on RCT and OV, respectively. IGMEL remained below \$50,000/QALE when the IGMEL regimen was up to \$477/year and \$1378/year more expensive than CMPL, based on RCT and OV, respectively. CONCLU-SIONS: The results from this study suggest that over a diabetes patient's lifetime, significant improvements in LE and QALE will result and provide strong evidence for economic and patientcentered value for this integrated blood glucose meter.

#### PDB7

### THE RELATIVE COST EFFECTIVENESS OF INSULIN GLARGINE VERSUS NPH INSULIN IN THE UK IN PEOPLE WITH TYPE I DIABETES

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**OBJECTIVES:** The purpose of this study was to evaluate the relative cost effectiveness (cost utility) of insulin glargine in the UK for the treatment of people with Type 1 diabetes mellitus (T1DM) using pooled data from the Phase III clinical trials programme. **METHODS:** This was a health economic evaluation using a stochastic simulation model. Transition probabilities for progression to diabetes-related complications were derived mainly from the DCCT (Diabetes Control and Complications Trial). Costs were derived from published estimates and local data. The maximum time horizon was 40 years to ensure effective modelling of diabetes patients. Utility values were extracted from the Health Outcomes Data Repository (HODaR) and published sources. Costs were calculated from UK £2005 prices. Costs and benefits were discounted annually at 3.5%. In this case, the model reported the experiences of 1000 subjects averaged over ten repeat simula-