of expertise have organized, collaborative links with community home care services and sufficient resources. **CONCLUSIONS:** Home chemotherapy requires a well-integrated multidisciplinary team of health professionals in partnership with selected patients and their informal caregivers. Our study shows the need for regionalized approaches within centralized standard setting and funding, increased resources and support for program evaluation, and a comprehensive cancer care model.

DIABETES—Economic Outcomes

PDB1

COST-EFFECTIVENESS OF SWITCHING PATIENTS TO COMBINED GLIBENCLAMIDE AND METFORMIN (GLUCOVANCE) WHEN POORLY CONTROLLED WITH METFORMIN MONOTHERAPY: THE FRENCH PERSPECTIVE

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OBJECTIVES: Poor glycaemic control is associated with increased risk of micro- and macro-vascular disease in type 2 diabetes (T2D) patients. Switching patients from metformin to Glucovance (combined glibenclamide/metformin) leads to improved glycaemic control in previously poorly controlled patients. No long-term studies have been performed that compare complication rates, mortality, and long-term costs in patients switched from metformin to Glucovance. A method was sought to link the effects on glycaemic control of switching from metformin to Glucovance to long-term complication rates and associated costs. **METHODS:** A validated model was used to quantify the improvements in life expectancy (LE), the changes in total lifetime costs (TC) associated with the improved glycaemic control seen with switching patients from metformin to Glucovance. Standard Markov modelling was used to describe the long-term incidence and progression of diabetes-related complications (angina, MI, stroke, heart failure, peripheral vascular disease, neuropathy, foot ulcer, amputation, renal disease, and eye disease). Probabilities of complications and HbA1c-dependent adjustments were derived from published studies. Switching from metformin to Glucovance lead to a 1% point improvement in HbA1c. Direct costs of diabetes complications and treatment with either metformin or Glucovance were projected over patients' lifetimes (discounted 5% p.a.). Costs of complications were retrieved from published sources. A French third party payer perspective was taken. A typical type 2 diabetes cohort (baseline age of 59) was simulated over a 30 years period. Exstensive sensitivity analysis was performed. **RESULTS:** Improved glycaemic control after switching from metformin to Glucovance lead to decreased incidence and progression of diabetes-related complications, with an increase in LE of 0.80 years, and reduction in TC/patient of €2,050. **CONCLUSIONS:** Switching from metformin to Glucovance is dominant to maintaining patients on MET monotherapy with poor control. Further long-term clinical studies with economic data collection are required to confirm these results.

PDB2

COST-EFFECTIVENESS ANALYSIS OF GLYCEMIC CONTROL WITH PIOGLITAZONE HYDROCHLORIDE FOR JAPANESE PATIENTS WITH TYPE II DIABETES

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OBJECTIVES: To estimate the cost-effectiveness of glycemic control with pioglitazone hydrochloride compared to conventional treatment for Japanese patients with Type II diabetes. **METHODS:** This study used the Japanese Diabetes Risk Simulation Software to estimate the lifetime cost per life-year or quality-adjusted life year (QALY). The hypothetical cohort was comprised of 1000 individuals living in Japan, aged 50 years, who were newly diagnosed as having Type II diabetes without retinopathy, nephropathy complications or history of coronary heart disease (CHD). Clinical effectiveness data were taken from the results of clinical trials conducted in Japan. Cost data were based on the fee schedule used for hospital outpatients in 2000. Costs (in 2000, Japanese yen), life expectancy and QALYs were discounted at 3% per annum. **RESULTS:** Glycemic control with pioglitazone hydrochloride reduced the cumulative incidence of blindness, dialysis and CHD by 22.2%, 12.2% and 7.9%, respectively. As a result, it produced a net saving of 390,000 yen per patient over the lifetime despite the additional annual cost of 70,000 yen for pharmacotherapy. Increased life expectancy was 0.61 years, and 0.68 QALYs was gained. **CONCLUSIONS:** Glycemic control with pioglitazone hydrochloride reduces costs and improves health outcomes relative to conventional treatment in patients with Type II diabetes in Japanese clinical settings.

PDB3

INTENSIVE LIFESTYLE CHANGES OR METFORMIN IN OVERWEIGHT, GLUCOSE INTOLERANT PATIENTS: MODELING THE LONG-TERM HEALTH ECONOMICS IMPLICATIONS OF THE DIABETES PREVENTION PROGRAM IN THE FRENCH, GERMAN, AND UK SETTINGS

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OBJECTIVES: In the Diabetes Prevention Program (DPP), overweight patients with impaired glucose tolerance randomized to either intensive lifestyle changes (ILC) or metformin (MET) reduced their risk of develop-

ing type 2 diabetes (T2D) by 58% and 31% respectively, vs. controls. A model was developed to explore the long-term cost-effectiveness of DPP interventions in France, Germany, and UK. **METHODS:** A Markov model simulated 3 states: "IGT", "T2D", and "dead". Probabilities were derived from DPP and published mortality data. Life expectancy (LE) was calculated for each treatment arm. Country-specific direct costs were retrieved from published sources. Lifetime costs/patient (TC) were calculated. Incremental cost-effectiveness ratios were calculated (costs/life-year gained [C/LYG]). (TC and LE discounted 5% p.a.). Extensive sensitivity analysis was performed to identify parameters with important impacts on outcomes. **RESULTS:** Time to onset of diabetes was 8.27, 14.44, and 10.76 years for placebo, ILC, or metformin respectively. Delaying the onset of T2D with either ILC or MET improved discounted LE vs. placebo by 0.19 and 0.08 years respectively. ILC lead to TC increases vs. placebo of €2958, 1365, and 1707/patient for France, Germany and UK respectively; and for MET increases vs. placebo of €636, 374, and 316/patient for France, Germany and UK respectively. C/LYG were: France—ILC vs. placebo €15,568 and MET vs. placebo €7,950; Germany—ILC vs. placebo €7,184 and MET vs. placebo €4,675; and UK—ILC vs. placebo €8,984 and MET vs. placebo €3,950. Results were most sensitive to the probabilities of developing T2D, the relative risk of mortality for the state T2D compared to IGT, and the costs of implementing the DPP. **CONCLUSIONS:** ILC and MET delayed diabetes onset and lead to improvements in LE. Both ILC and MET were highly cost-effective in all 3 countries (i.e. C/LYG < €28,000).

PDB4

THE HEALTH-ECONOMIC IMPLICATIONS OF THE "IRBESARTAN IN DIABETIC NEPHROPATHY TRIAL" (IDNT) IN FRANCE AND BELGIUM

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OBJECTIVES: The Irbesartan in Diabetic Nephropathy Trial (IDNT) demonstrated a 20% and 23% reduction compared to no treatment or amlodipine respectively in the combined endpoint of doubling of serum creatinine (DSC), end-stage renal disease (ESRD) or death in patients with hypertension (treated with all antihypertensive drugs except ACE-inhibitors and Ca-antagonists), type 2 diabetes and overt nephropathy (H-T2DM-N). A simulation model was developed to project the long-term cost-consequences of the IDNT in Belgium and France. **METHODS:** A Markov model simulated progression from nephropathy to DSC, ESRD, death, and cardiovascular events in H-T2DM-N treated with irbesartan, amlodipine, or placebo. Treatment-specific probabilities were derived from IDNT. Country-specific ESRD-related transition probabilities were retrieved to reflect local management practices and ESRD outcomes. Country-specific costs were derived from published sources. A 25-year time horizon was used. Mean total lifetime costs (TC) and life expectancy (LE) were calculated for patients with baseline age 59 years (mean age of the IDNT population). Future costs and benefits were discounted at 3% p.a. Sensitivity analysis was performed to identify parameters with an important impact, and to assess the effect of varying key assumptions on the robustness of the model. **RESULTS:** In Belgium, irbesartan lead to improved LE of 0.62 years and 0.42 years, and projected 25 year TC savings of €11,776 and €20,132/patient versus no treatment or amlodipine respectively. In France, improvements in LE were similar, but cost savings were greater (TC savings of €14,382 and €23,249 versus placebo or amlodipine respectively). The results were robust under a wide range of plausible assumptions. **CONCLUSIONS:** Treating hypertensive type 2 diabetes patients with nephropathy using irbesartan was both cost- and life-saving compared to amlodipine or antihypertensive therapy alone.

DIABETES—Clinical Outcomes

PDB5

LONG-TERM CONSEQUENCES FOR THE TREATMENT OF HYPERTENSIVE DIABETES TYPE 2 PATIENTS WITH A FIXED COMBINATION OF AN ACE-INHIBITOR AND NON-DIHYDROPYRIDINE-CALCIUM-CHANNEL-BLOCKER IN COMPARISON TO OTHER COMBINATION THERAPIES

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OBJECTIVE: Comparing a fixed combination of an ACE-inhibitor and a Non-Dihydropyridine-Calcium-Channel-Blocker (trandolapril/verapamil) with other medications in the treatment of hypertensive type-2 diabetics to determine medical consequences of a beneficial metabolic effect as judged by HbA1c value. **METHODS:** A computer model was developed in order to assess long-term effects of various levels of HbA1c on diabetes-related complications for hypertensive patients with diabetes type-2, who were treated with fixed antihypertensive combinations. Data from 2 clinical studies were extrapolated to 10 years. The expected event rate was calculated per treatment group, based on UKPDS data. Complications included in the model: renal failure, photocoagulation, vitreous hemorrhage, blindness, cataract extraction, amputation, myocardial infarction, angina,