and costs of treating CVD complications in Swiss patients with and without MS, using the National Cholesterol Education Program Adults Treatment panel III (NCEP/ATP III) definition. The 5-state Markov model utilized predictive regression equations and transition probabilities from the Framingham and PROCAM epidemiological studies. Patient characteristics were taken from the Lausanne Health Promotion Database which consisted of 9401 patients aged 18 to 79 years. Patients in the database were segmented according to their status of meeting the criteria of having MS, CMRF, and their age. Direct medical costs were accounted in 2005 Swiss Francs (CHF). Outcomes were projected over a lifetime horizon and discounted at 5% per annum. RESULTS: The presence of MS was projected to result in decreased LE by 2.29 years (16.27 vs 13.98 years) compared to individuals without the syndrome. The presence of MS was consistently associated with lower LE in all patient age groups. Direct medical costs of treating CVD complications in patients with MS were CHF 4413 higher than patients without the syndrome (CHF 8382 vs. CHF 3969). The largest differences in cost were estimated for patients aged above 75 years (CHF 11,744 vs. CHF 6707). CONCLUSIONS: On the basis of the NCEP/ATP III definition, our modeling analysis concludes that the presence of MS decreases LE (~2.29 years) and increases CVD costs (CHF 4413) per patient in the Swiss setting. These data suggest that the costs of future interventions targeted at the causes/management of MS could be offset by reduced CVD costs.

PCV36
A HEALTH ECONOMIC EVALUATION OF CONCOMITANT SURGICAL ABLATION FOR ATRIAL FIBRILLATION
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OBJECTIVES: Atrial fibrillation (AF) is the most common arrhythmic condition, with rising prevalence. AF increases stroke and mortality rates. Ablation (percutaneous and surgical) provides a more permanent solution to AF compared to drugs and reduces stroke and mortality rates. Performing surgical ablation (SA) concomitantly to cardiac surgery (CABG or valvular repair) only lengthens surgery with maximum 30 min without increasing complication rates. The aim of this study was to assess the cost-effectiveness of concomitant SA for permanent AF, with the UK as a case country. METHODS: A Markov model, comparing no ablation during surgery (NSA) with concomitant SA for AF, was developed in TreeAge. The initial cardiac surgery (with or without SA) can result in short-term complications (mortality, stroke, bleeding leading to re-surgery, and pacemaker implantation) or not. 4 different health states were defined: sinus rhythm without complications, AF with complications and surgical, and AF with complications and surgical repair. Clinical data were derived from published data (3-month free of AF after SA 81% vs. 23% for NSA). Direct costs from the NHS (2006) perspective were used. The cost of SA was assumed to be GBP2500. Utility data (TTO) were obtained from published data and from the Euro Health Survey (utility permanent A = 0.78). Costs and effects were discounted at 3.5% annually. RESULTS: Over the 5-year modeling period SA resulted in 0.427 QALY gained (3.079 QALY vs. 2.652 QALY) for an additional cost of GBP2054 (GBP4567 vs. GBP2513). The incremental cost-effectiveness ratio (ICER) was GBP4810/QALY. Doubling the modelling period decreased ICER with 50%. Increasing utility of AF to 0.97 increased ICER to GBP19,106/QALY. CONCLUSIONS: Compared to no ablation, concomitant SA is a cost-effective treatment for AF in the UK.

PCV37
COST-EFFECTIVENESS OF LONG-TERM TREATMENT OF HYPERTENSION WITH IRBESARTAN VS. LOSARTAN OR NO TREATMENT IN DENMARK
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Hypertension is a common condition leading to increased risk of excess mortality and morbidity from cardiovascular events (AMI and stroke). Furthermore, it is known that blood pressure reduction of 2–5 mmHg has an impact on the patients risk for cardiovascular events and mortality. In a double blinded RCT irbesartan 300 mg reduced systolic blood pressure by 16.4 mmHg while losartan 100 mg reduced blood pressure by 11.3 mmHg. P value was significant (p < 0.05). OBJECTIVE: To assess the cost-effectiveness of long-term treatment of hypertension with irbesartan vs. losartan in a Danish setting. METHODS: A Markov model was developed using the SCORE risk function to predict cardiovascular events depending on blood pressure level and other risk factors. The effect of irbesartan and losartan was taken from a RCT study with direct comparison (the Kassler-Taub study). In this study, irbesartan was also compared to no treatment. In the model, lifelong treatment was evaluated with either early intervention, when hypertension occurs (age 55), or late intervention after the occurrence of the first cardiovascular event. Health outcomes were number of cardiovascular events, life years and QALYs gained. Danish costs and epidemiological data were applied. RESULTS: Irbesartan was shown to be cost-saving vs. losartan (~£3.950/LYG). Compared to placebo, early intervention was shown to be more cost-effective relative to late intervention. CONCLUSIONS: Long-term treatment of hypertension with irbesartan can be cost-saving compared to treatment with losartan.

PCV38
COST MINIMIZATION ANALYSIS OF BIVALIRUDIN VERSUS HEPARIN PLUS PLANNED ABXICIMAB IN PATIENTS UNDERGOING PERCUTANEOUS CORONARY INTERVENTION
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OBJECTIVES: Bivalirudin, a selective thrombin inhibitor, has been approved as an alternative treatment to the use of heparin in patients undergoing percutaneous coronary intervention (PCI). The objective is to evaluate the efficiency measured as the health care costs savings, due to the replacement of the current heparin plus glycoprotein IIb/IIIa inhibition (abciximab) by bivalirudin in patients undergoing PCI. METHODS: Regarding the incidence of ischaemic events, it has been proved the equivalence between heparin plus inhibitors of glycoprotein and bivalirudin, noticing a smaller rate of bleeding complications in the group treated with bivalirudin (REPLACE 2). Based on this finding a cost minimization analysis (CMA) has been carried out focusing on the differential costs when using both treatments: the drug cost, the cost of major bleeding management (bleeding at puncture point and digestive bleeding). Two experts in inter-
ventionist cardiology verified the cost of the management of bleeding complications. RESULTS: The management cost of 100 patients subjected to PCI and treated with heparin plus abciximab is €89,023.67, and €57,703.76 if treated with bivalirudin, which results in an incremental cost of €313.2 per patientk. In the group of patients subjected to PCI, with the bivalirudin option, and without modifying the hospital budget, 54 out of 100 patients more could be treated with a similar level of protection and a smaller bleeding risk. CONCLUSIONS: Bivalirudin should be considered as the anticoagulant first option in those patients undergoing PCI and that are currently receiving heparin plus glycoprotein IIb/IIIa inhibition.

PCV39

PHARMACOLOGICAL TREATMENT OF HYPERTENSION IN PATIENTS WITH TYPE II DIABETES A COST-MINIMIZATION ANALYSIS

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OBJECTIVE: to study direct medical costs for treatment of mild to moderate hypertension in patients with type II diabetes in the perspective of the Italian National Health care System (NHS).

METHODS: this was a randomized parallel group clinical study; after a 2 weeks run-in period, eligible patients DBP≥90 < 140 mmHg were randomized to treatment with delapril (D) 30±110; SBP mg/die, ramipril 2.5 mg/die (R) or valsartan (V) 80 mg/die. After 6 weeks of active treatment, uncontrolled patients were switched to combination therapies: D + manidipine 10 mg (D + M); R + hydrochlorothiazide 12.5 mg (R + HCTZ); V + hydrochlorothiazide 12.5 mg (V + HCTZ), whilst patients with satisfactory BP levels were kept on monotherapy. The economic analysis was run in the perspective of the Italian NHS; only direct medical costs were considered, including study drugs, unscheduled medical visits and tests, hypoglycaemic drugs and drugs used to treat adverse events. Year 2006 market prices and NHS tariffs were applied; for D + M we considered a target price of €23.24 for 28 tablets pack (not marketed yet in Italy). RESULTS: 425 patients were included (ITT), of which 139 were treated with D/D + M, 145 with R/R + HCTZ and 141 with V/V + HCTZ. No statistically significant differences were found among the 3 study groups, on the primary efficacy variable of DBP, on the number of patients requiring combination therapy and on secondary efficacy parameters. Therefore the economic analysis was a cost-minimization analysis with costs normalised at 1 year to account for slightly different lengths of follow-up. Average costs per patient/year for D/D + M vs. R/R + HCTZ and V/V + HCTZ was €643 vs. €636 vs. €759 respectively. CONCLUSION: the study demonstrates that, despite similar BP control, there are differences in the NHS annual cost, between patients treated with ACE inhibitors (with/without diuretic or CCBs) and those treated with a specific angiotensin II receptor antagonist (with/without diuretic).

PCV40

A COST-EFFECTIVENESS ANALYSIS OF CARDIAC REHABILITATION AFTER PERCUtANEOUS CORONARY INTERVENTIONS

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OBJECTIVES: Multiple publications have reported the positive effects of rehabilitation in cardiac patients, also post-percutaneous coronary intervention (PCI). However, the cost remains an important hurdle for the payer to fully support cardiac rehabilitation. The aim of this study was to, retrospectively, assess the clinical outcomes and associated costs of patients who underwent PCI with or without rehabilitation in a Belgian hospital. METHODS: The patient files of 213 consecutive patients who underwent a PCI between February 1998 and December 1999 were analysed in January 2006. 133 patients started a 3-month rehabilitation program, 80 did not. All major adverse cardiac events (including angina, MI, re-PCI or CABG, other hospitalisation, cardiovascular and other death) were reported. All the events that occurred over the study period were costed using unit cost data from the payer’s perspective obtained from official sources. The cost of one rehabilitation session is €23.25. RESULTS: The average follow-up period was 4.8 years. The average number of rehabilitation sessions performed was 42.1. Less (not significantly) patients in the rehabilitation group were re-hospitalised (43% vs. 56%; p = 0.065) and the number of re-hospitalisations (more than 1 per patient) for angina (45% vs. 75%; p < 0.01) and revascularizations (8% vs. 18%; p < 0.05) was significantly reduced. Mortality was not different between the treatment groups. The average cost per patient over the 4.8 years study period was €4862 (st.err €529) in the rehabilitation and €5498 (st.err €741) in the no rehabilitation group (p = NS). Patients in the rehabilitation group were younger (p < 0.01) but logistic regression analysis (univariate and multivariate) showed no significant effect of age on angina and revascularization incidence in the total population. CONCLUSIONS: The cost of cardiac rehabilitation is more than totally offset by the significant reduction in cardiac events. Based on this study a cardiac rehabilitation program should be installed in all patients undergoing PCI.

PCV41

A COST CONSEQUENCE ANALYSIS OF THE IMPACT OF JBS 2 ON PATIENTS ELIGIBLE FOR STATIN TREATMENT IN SCOTLAND

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OBJECTIVES: The Joint British Societies (JBS) 2005 guideline on prevention of cardiovascular disease (CVD) advocates prevention in people with established CVD, with diabetes and with CVD risk ≥20% over 10 years. This study was designed to establish the number of patients eligible for statin treatment in Scotland under these new guidelines, compared to those previously eligible under the National Service Framework (NSF) for CHD 2000, and estimate the budget impact of treating these additional patients to the JBS 2 optimal total cholesterol (TC) target of <4.0 mmol/L. METHODS: Data from the Scottish Health Survey 2003 (mean baseline TC, incidence of CVD and diabetes) were combined with predicted coronary heart disease (CHD) risk estimates and population statistics in an Excel-based model to estimate number of eligible patients. Efficacy data from the STELLAR (Statin Therapies for Elevated Lipid Levels compared Across doses to Rosuvastatin) trial and pack costs from standard sources were used to determine percentage of patients reaching the specified TC target and annual treatment costs for alternative strategies comprising simvastatin 40 mg followed by either atorvastatin (20 mg, 40 mg and 80 mg) or rosuvastatin (10 mg, 20 mg and 40 ng). RESULTS: The results using JBS 2, showed 21.3% of the adult population in Scotland is eligible for statin treatment: a total of 881,402 people. Using the NSF, only 12.4% or 513,600 people were eligible, this is an increase of 367,802 (8.9%). The cost of treating these additional patients with the