METHODS: A within trial study was designed. Survival gains were estimated using an extraction of comparable patients from the Saskatchewan Health Data Base. A piecewise regression model yielded death rates adjusted on patients' characteristics. Resource use was collected alongside the clinical trial. Only direct medical costs were considered. Hospital costs were calculated using French DRG costs, and the National Fee Schedule for outpatient diagnostic procedures. All costs were in 2003 Euros. A sensitivity analysis using bootstrap was used to build a confidence interval for the Incremental Cost-Effectiveness Ratio, and an acceptability curve. Costs and outcomes were discounted at five percent. RESULTS: Overall mortality over the trial period was 478 (14.4%) in the treatment group vs. 554 (16.7%) in the placebo group (p = 0.008). Combined CV deaths and hospitalisations were 885 (26.7%) in the treatment group, vs. 993 (30.3%) in the placebo group (p = 0.002). The discounted gain of survival was 3.2 weeks. The incremental cost per life year saved was €15,382 (95% IC: €8274–€42,723). Following the sensitivity analysis, 74% of the values of the ICER fell under a €50,000 per life-year saved. CONCLUSIONS: In France, the ICER compares with those of heart transplantation (€17,626) and of rt-PAs in the prevention of thrombotic events during the acute phase of AMI (€121,190). The main limitation of the study is the restriction to the duration of the trial. Sub-group analysis was not performed in the EPHESUS trial, and it was not possible to compute an ICER for severe heart failure patients, for which one can expect a lower cost per life-year saved.

PCV25
THE ADD-ON TREATMENT WITH METOPROLOL SUCCINATE IN PATIENTS WITH CHRONIC HEART FAILURE (CHF) LEADS TO COST SAVINGS IN THE GERMAN HEALTH CARE SYSTEM—A MODEL APPROACH
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OBJECTIVES: The health economic impact of an additional metoprolol succinate treat-ment (METsuc) in patients with chronic heart failure (CHF) was analyzed for “real life” treatment patterns on the basis of the MERIT-HF—Trial (Metoprolol CR/XL Randomized Intervention Trial in Congestive Heart Failure). METHODS: Based on the efficacy data of the MERIT-HF, a markov model was created to simulate the effectiveness of METsuc treatment under real-life conditions. The additional direct costs associated with METsuc were examined in relation to the number of fatalities and of hospitalizations avoided. The cost analysis was conducted from the perspective of the German Statutory Health Insurance (SHI). Base year for the cost data was 2004. Probabilities were derived from the MERIT-HF—Trial. Missing data for this approach were assessed with the help of a focus group with eight general practitioners and cardiologists. Further, the number of life-years gained was calculated by using the DEALE method (Declining Exponential Approximation of Life Expectancy). RESULTS: For the period observed (18 months), additional METsuc treatment does not lead to additional costs for the Statutory Health Insurance (SHI) in Germany. With the application of METsuc, costs of about 3400 EUR per fatality and almost 1800 EUR per hospitalization could be avoided. The life expectancy of a CHF patient is 1.51 years higher in comparison to standard treatment alone. Univariate sensitivity analyses were conducted to demonstrate the robustness of the results. CONCLUSIONS: The additional costs for METsuc in the outpatient sector are compensated by reduced expenditures in the inpatient sector as well as in the field of ambulance transportation. On the basis of the present analysis the treatment with metoprolol succinate represents an approach for integrated health care under a clinical as well as under an economical perspective.

PCV26
COST-EFFECTIVENESS OF CANDESARTAN IN GERMANY FOR PATIENTS WITH CHRONIC HEART FAILURE
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OBJECTIVES: To evaluate the cost-effectiveness (CE) of candesartan for patients with chronic heart failure (CHF) in Germany based on the CHARM (Candesartan in Heart failure: Assessment of Reduction in Mortality and Morbidity) programme. METHODS: Two CE-analyses were conducted: incremental cost-per-avoided-event and incremental cost per life-years gained. Effectiveness data were derived from the CHARM-programme which provided data on three treatment groups with CHF-patients: “Added” (low left ventricular ejection fraction (LVEF <40%), “Alternative” (LVEF <40% and patients’ ACE-inhibitor intolerance) and “Preserved” (LVEF >40%). Besides, an “Overall” analysis was processed. All cardiovascular events (Hospital admissions due to worsening heart failure, cardiovascular deaths, and cardiovascular procedures) were extracted. Absolute risk reduction (ARR; only first events counted) to prevent/delay one event was evaluated. Cost calculation was performed from the perspective of the German statutory health insurance (SHI). Base year for costing was 2004. Only direct costs (drug, hospital, general practitioner, specialist, ambulance, rehabilitation) were considered. Incremental costs between candesartan and placebo were used building a ratio with ARR. Long-term effectiveness was estimated calculating the incremental costs per life-year gained (LYG). LYG were generated using the DEALE (Declining Exponential Approximation of Life Expectancy)-approximation. RESULTS: The incremental costs to prevent/delay a cardiovascular death or a hospital admission were €2279 (“Added”), €2763 (“Alternative”), €31,015 (“Preserved”) and €7717 (“Overall”). The incremental costs per life-year gained were 47 EUR (“Added”), 131 EUR (“Alternative”), €11,054 (“Preserved”) and €231 (“Overall”). Sensitivity analyses were conducted for all treatment groups. The results were robust to variations of costs, discounting rates and effects. CONCLUSIONS: With regard to the results of the treatment groups “Added” and “Alternative”, candesartan is a cost-effective treatment option for patients with low left ventricular ejection fraction in Germany.

PCV27
COSTS AND OUTCOMES AFTER FIRST HEART FAILURE HOSPITAL ADMISSION: A LONGITUDINAL STUDY USING ADMINISTRATIVE DATABASES
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OBJECTIVE: To assess the economic and epidemiologic impact of CHF in Friuli Venezia Giulia (FVG) a region of approximately 1.2 million inhabitants in the north-eastern Italy. METHODS: All residents of FVG are registered in to Regional Health Service (RHS) database, which keeps track of the use of medical care admissions and reimbursement purposes. We selected residents of FVG who had during year 2000 a first CHF hospital admission and we followed them up till death, or December 31, 2004. (we a priory excluded people who during the period 1995–1999 had a previous CVD event). Mortality was investigated by collecting information from Regional Citizen Register file. We obtained information on medical costs from electronic databases.
of prescriptions, hospitalizations, visits and diagnostic examinations in FVG. Direct medical costs were quantified in the perspective of the RHS and are expressed in Euro 2005. RESULTS: We enrolled 2122 patients with incident CHF (mean age 78 ± 11 y.o.), 55.3% were women. The average cost person/year was €5896, 54% attributable to hospitalisations, 13.7% to drugs, 6.3% to other medical costs. A total of 1320 (62.2%) patients died during the follow-up period. Mortality was higher in male (p < 0.0001) and older subjects (p < 0.0001). CONCLUSIONS: CHF imposes a huge economic burden on NHS and society because of the large number of hospitalisation and the high rate of mortality after the first event. Future investigations will be conducted to assess the relationships between comorbidity, costs, drug therapy and survival.

PCV29

IMPACT OF MODIFIED SYSTEM OF OBJECTIFIED JUDGMENT ANALYSIS (SOJA) METHODOLOGY ON PRESCRIBING COSTS OF ANGIOTENSIN CONVERTING ENZYME INHIBITORS (ACEIS)

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OBJECTIVE: SOJA is a structured approach to the selection of drugs for formulary inclusion. The aim of this study was to use a modified SOJA approach in the selection of ACEI products for use within a health board in Northern Ireland. METHODS: The modified SOJA approach involved three phases in sequence: an evidence based pharmacotherapeutic evaluation of all available ACEI drug entities, a separate safety / risk assessment analysis of products containing agents which exceeded the pharmacotherapeutic threshold and finally a budgetary impact analysis. A comprehensive literature review and expert panel judgment, informed selection of criteria (and their relative weighting) for the pharmacotherapeutic evaluation. The resultant criteria / scoring system was circulated (in questionnaire format) to prescribers and stakeholders for comment. Based on statistical analysis of the latter survey results, the final scoring system was developed. Drug entities which exceeded the evidence threshold score were entered into a tendering process with pharmaceutical suppliers. Products submitted as a result of the tendering process were sequentially entered into the second and third phases of the modified SOJA process (safety / risk assessment; budgetary impact analysis). RESULTS: Five drug entities (from the 11 currently available in the UK) exceeded the evidence threshold and 22 from 26 submitted product lines, containing these drug entities, satisfied the safety evaluation / risk assessment criteria. Three product lines, each containing a different drug entity, were selected for formulary inclusion as a result of the budgetary impact analysis. The estimated annual cost savings for ACEIs as a result of this selection (based on estimated annual usage in Defined Daily Doses) in this health board was 41%. CONCLUSION: The modified SOJA approach has a significant contribution to make in containing ACEI costs while retaining the same level of patient care.

PCV30

CLOPIDOGREL LOADING DOSE AND CARdiovascular OUTCOMES IN ACUTE CORONARY SYNDROME PATIENTS WHO UNDERGO PERCUTANEOUS CORONARY INTERVENTION

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OBJECTIVES: The 2002 AHA/ACC guideline recommends acute coronary syndrome patients who undergo percutaneous coronary intervention (ASC-PCI) be given 300mg loading dose (LD) of clopidogrel, but higher LD has emerged in practice. A recent trial involving 255 patients found 600mg of clopidogrel had better outcomes than 300mg (Patti et al, 2005). The current study investigates whether patients treated with higher clopidogrel LD experience better outcomes in the usual care setting. METHODS: We followed 6,282 ACS-PCI patients in a national hospital database with time-stamp information (1/2003-9/2004) for 60 days upon discharge. Using the time-stamp, LD was measured as total dose within 24-hour window of peri-PCI procedure, and myocardial infarction (MI) was captured from post-procedure lab tests. Patients receiving >300mg are grouped into high LD (HLD) (nH = 1465) and ≤300mg, the low LD group (LLD) (nL = 4152). Primary endpoints (i.e., death, stroke, repeat revascularization, and MI) plus bleeding and re-admission were monitored. Logistic regression tested effects of LD on events with controls for risk. RESULTS: LD ranged from 75 mg to 1275 mg. The HLD group did not experience better outcome. While 28.49% of LLD experienced an event, the rate was 44.23% for the HLD (p = 0.0001). MI rate was higher for HLD.