ECONOMIC OUTCOMES IN AN UNSELECTED IMPACT OF DRUG ELUTING STENTS ON CLINICAL AND CLINICAL CHARACTERISTICS, MEDICATION AND COSTS IN diogenic shock were both in 13%. Total direct in-hospital and symptoms prevailed (49.3%), pulmonary oedema and car-

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during hospitalization in patients with AHF .

OBJECTIVES: Acute heart failure (AHF) is life a threatening disease which includes variable causes and complications. The aim was to assess clinical characteristics, medication and costs during hospitalization in patients with AHF. METHODS: Patients hospitalized in a cardiological dpt. of the Faculty Hos-

tival Brno in January 2005–July 2007 were classified according to the Guidelines on the diagnosis and treatment of AHF by the European Society of Cardiology and their medication was fol-

owed at admission and during the stay. In-patient care costs

include flat rate of admission, stay and medicinal procedures. (1€ = 25 CZK) RESULTS: In total, 1213 patients (57.5% male, mean age 72.5 years) with AHF were analyzed. The chronic medication involved diuretics in 51%, less than half used anti-

platelet drugs, beta-blockers and ACE-I (28.3%), nitrates (23.6%), digoxin (21.8%). Positive inotropics were indicated in acute state: norepinephrine (20.4%), dopamine (11.4%), dobut-

amine (10%), epinephrine (9.5%) and levosimendan (4.8%). New-onset AHF (57%) was more common than decompensated AHF and was concerned with higher costs. AHF with mild signs and symptoms prevailed (49.3%), pulmonary oedema and cardiogenic shock were both in 13%. Total direct in-hospital expenses were €4.4 million; mean in-patient cost was €3621. The most expensive were patients in cardiogenic shock with only 3 days of hospitalization (overall mean length-of-stay 8.2 days). The predictors of high costs were antiarrhythmic interventions (PM and ICD; 5.9% patients) making up to 21% of total expenses and revascularizations (coronary angiography followed by PCI in 31.5% patients) which made 41% of total expenses.

CONCLUSIONS: The treatment of heart failure patients uses 1–2% of health care budget in developed European countries of which 2/3 are being spent on hospitalizations. AHF hospitalization is more frequent as the population ages (62% patients were more than 70 years old) and is associated with poor prognosis (in-hospital mortality 14.5%).

OBJECTIVES: To assess clinical and economic outcomes of PCI following the commercial availability of drug-eluting stents (DES). METHODS: We identified all patients undergoing PCI from 2000–2002 (pre-DES era) and from 2004—April 31, 2006 (DES era) in a large PCI registry that includes demographic, clinical, angiographic, procedural and outcome information. Administrative data were used to estimate length of stay (LOS) and procedural costs, as well as cardiac hospitalization costs during year follow-up. We used logistic and Cox proportional hazard models to estimate the adjusted risk of adverse events within propensity score stratum and generalized linear modeling to predict LOS, procedural and follow-up hospitalization costs by treatment era. RESULTS: We compared 3422 patients from the DES era (mean age 67, 69% male) and 4303 patients from the pre-DES era (mean age 67, 70% male). 90% of pre-DES era patients had bare-metal stents implanted; whereas 83% of DES era patients had DES. Adverse event rates were similar between time periods (adjusted odds ratio for in-hospital myocardial infarction (MI) in DES era: 0.79; 95% CI 0.62, 1.00). During a median 22 month follow-up, the adjusted incidence of death or MI was similar between cohorts, but follow up procedures were reduced in the DES era (hazard ratio for target lesion revascularization in DES era vs. pre-DES era: 0.58; 95% CI 0.50, 0.68). Models predict a mean LOS reduction of 0.40 days in the DES era and procedural cost savings of $2053 (95% bootstrapped CI of adjusted mean difference: −2917, −1197). Follow-up cardiac hospitalization costs were similar. CONCLUSIONS: In a large unselected PCI cohort, the introduction of DES was associated with improved clinical outcomes during follow-up and reduced in-hospital costs. These data suggest costly new technologies can be introduced into a general practice setting while maintaining and improving patient outcomes at an incremental cost savings.

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PCV70

COST-EFFECTIVENESS OF CLOPIDOGREL IN COMBINATION WITH ASPIRIN FOR ACUTE CORONARY SYNDROMES IN AUSTRALIA

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OBJECTIVES: To determine if clopidogrel plus aspirin is cost-effective compared to aspirin alone for patients following ACS, from the Australian health care perspective. METHODS: A Markov model was constructed by extrapolation of data from the Australian Acute Coronary Syndromes Prospective Audit (ACACIA) registry (n = 2553) in the first model cycle, and the Reduction in Atherothrombosis for Continued Health (REACH) registry (n = 2567 Australian patients) in subsequent cycles. Decision analysis was applied to compare clopidogrel plus aspirin against aspirin alone. Efficacy data were drawn from the Clopidogrel in Unstable Angina to Prevent Recurrent Events (CURE) trial. A utility study was conducted in 2007 with 86 participants using health states validated by clinical experts. Drug and disease costs were obtained from literature and health care reimbursement fees, and updated using Australian health price indices. An annual discount rate of 5% was applied to all costs and effects beyond one year in accordance with reimbursement guidelines. Twenty sensitivity analyses were undertaken, varying the 95% confidence intervals surrounding efficacy measures from CURE, uncertainty in cost and utility inputs and variations to time horizons and discount rates. RESULTS: The base-case incremental cost-effectiveness ratio (ICER) with a ten-year time horizon was A$14,496/QALY and remained below the unofficial cost-effectiveness threshold of A$40,000/QALY throughout all sensitivity analyses. Treatment remained cost-effective up to an inflated clopidogrel cost of 229%, and even when acute hospitalization costs were removed (A$20,267/QALY). The five-year ICER was A$20,124/QALY. Sensitivity analyses demonstrated that the ICER ranged from A$6,443/QALY when the risk of events observed in ACACIA were applied to all years, up to A$36,974/QALY using the 95% upper confidence interval for efficacy. CONCLUSIONS: Clopidogrel with aspirin represents a highly cost-effective treatment option for patients with ACS in Australia. This was confirmed by the Australian reimbursement authority’s recent recommendation that treatment with clopidogrel plus aspirin be reimbursed for ACS patients.

PCV71

COST/UTILITY ANALYSIS IN PATIENTS WITH DRUG REFRACTORY CONCOMITANT ATRIAL FIBRILLATION IN SPAIN

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OBJECTIVES: Atrial fibrillation is the most common arrhythmia in the clinical practice. It is related with an important morbidity, a decrease in patients’ quality of life and is a risk factor of suffering a stroke. The Spanish estimated atrial fibrillation prevalence is 2.52%, and is higher over 60 years. Radiofrequency surgical ablation is a treatment alternative to restore sinus rhythm in drug-refractory atrial fibrillation patients. The main objective of this study is to develop a five-year cost-utility analysis including the different treatment alternatives in drug-refractory concomitant atrial fibrillation patients in the Spanish setting. METHODS: A Markov model was developed to simulate the evolution of a 1000 cohort of over 40 years old patients with paroxistical and persistent atrial fibrillation that could be treated with: no ablation, surgical ablation and catheter ablation. The model included four health states: sinus rhythm, atrial fibrillation, dependent stroke and death. The time horizon was five years, with a cycle length of three months. The data of cost and effects were obtained from the published literature and experts opinion. Costs and effects were discounted at 3.5%. A sensitivity analysis was developed to determine the robustness of the main variables of the model. RESULTS: Based on 1000 patients simulation with concomitant atrial fibrillation, preliminary results show that the QALY gained were 3.79, 4.25, and 4.23, respectively for no ablation, surgical ablation and catheter ablation. The costs per patient were respectively 8889, 11,157 and 11,865. The cost per QALY gained of the most effectiveness option (surgical ablation) when compared with no ablation is €4909. Surgical ablation is a dominant option vs. catheter ablation. CONCLUSIONS: These preliminary results show that surgical ablation is a cost-effective treatment option in drug refractory concomitant atrial fibrillation patients in the Spanish setting, with less cost and a higher efficacy than the catheter ablation.