A323

BUDGET IMPACT MODEL FOR DETERMINING THE HOSPITAL COSTS OF INTRODUCING PRASUGREL FOR THE LONG TERM TREATMENT OF ACUTE CORONARY SYNDROME TREATED BY PERCUTANEOUS CORONARY INTERVENTION IN FRANCE


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OBJECTIVES: For patients with acute coronary syndrome (ACS) treated with percutaneous coronary intervention, 12-month dual antiplatelet therapy (aspirin plus prasugrel) is recommended. A phase III clinical trial (TRITON) in ACS patients with planned PCI demonstrated superiority of prasugrel versus clopidogrel on the primary composite endpoint (myocardial infarction, stroke, cardiovascular death) but also higher bleeding risk. This model was designed to estimate the impact on the hospital budget of the national health insurance of substituting prasugrel to clopidogrel.

METHODS: The budget impact model was based on index and recurrent hospital stays related to cardiovascular and bleeding causes from the economic cohort of TRITON (N = 6703) with a mean of 380 days of follow-up. A specific DRG code was attributed to each stay and transcodified to French DRG. A weighted cost was calculated based on public and private French DRG official tariff (2007), including an average cost for stents and intensive care unit costs. In-hospital costs of thyropoietin use were not included in the analysis. The time horizon was 1 year. Budget impacts were calculated for two groups: A) Patients with history of transient ischaemic attack (TIA) and stroke, B) Patients without TIA/stroke and weight ≥80 kg and ≤75 years old.

RESULTS: For Group A the costs for all patients for one year were €25,719.47 for prasugrel and €26,123.07 for clopidogrel, for Group B they were respectively €20,897.13 and €21,096.75. Predominant differences were on costs related to recurrent hospital stays (respectively for A: €5,501,374.76 and €6,053,118.09; B: €3,434,983.17 and €4,827,315.74). Substituting prasugrel to clopidogrel would result in daily savings of A) €0.45 per patient B) 0.466 per patient.

CONCLUSIONS: This budget impact model showed that prevention of recurrent events with prasugrel generates savings that could offset to some extent potential price differences with clopidogrel.

PCV61

COST OF EXERCISE TRAINING AND ITS IMPACT ON MEDICAL RESOURCE USE AND COSTS: RESULTS OF HF-ACTION TRIAL

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OBJECTIVES: The HF-ACTION study was a controlled trial to evaluate efficacy and safety of exercise training in patients with heart failure. A prospective economic evaluation was planned alongside the trial to evaluate resource use and costs associated with exercise training. METHODS: Between April 2005 and February 2008, 2,609 survivors of acute coronary syndrome (ACS) were randomized to 2331 heart failure patients with NYHA Class II to IV to usual care plus exercise training, consisting of 36 supervised sessions followed by home-based training, versus usual care alone. Data on medical resource use and hospital bills were collected throughout the trial. Intervention-related resource use was evaluated using patient-level data from the trial, administrative records, and published unit costs. Costs of care were computed using published regression models. Confidence intervals for cost differences were derived using nonparametric bootstrap method. RESULTS: Mean follow-up was 2.5 years in both groups. There were 2297 hospitalizations in the exercise training group (n = 1159) and 2332 in the usual care group (n = 1172). P = 0.924. The mean number of inpatient days was 13.6 (SD = 27.0) and 15.0 (SD = 31.4) days in the exercise training and usual care groups, respectively (P = 0.21). Additional measures of medical resource use, including urgent care visits, outpatient visits and procedures, home IV therapy, skilled nursing and rehabilitative care were similarly high between groups, with the exception of fewer patients in the exercise training group underwent high-cost inpatient procedures including heart transplant and/or placement of a left ventricular assist device (in 44 [5.7%] vs. n = 31 [2.7%], P = 0.14). Total direct medical costs were estimated at $50,837 (SD = 81,488) in the exercise training group and $56,177 (SD = 92,749) in the usual care group (95% CI for difference: $-12,753 to $1347). Direct cost of exercise training was estimated at $1006 (SD = 437). CONCLUSIONS: Exercise training had little systematic impact on medical resource use overall, but the cost of exercise training may have been offset through a reduction in high-cost procedures.

PCV62

PULMONARY ARTERIAL HYPERTENSION (PAH) COST OF ILLNESS IN THE U.S. PRIVATELY-INSURED POPULATION

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OBJECTIVES: Estimate annual direct costs for privately-insured U.S. pulmonary arterial hypertension (PAH) patients and matched controls. METHODS: From a privately-insured claims database (>6 million beneficiaries, 2002-2007), 951 PAH