long-term medical costs. RESULTS: Using 30-day mortality data from the Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries (GUSTO) trial, the baseline analysis yielded an ICER for t-PA of $24,882/QALY compared to SK. The ICER was sensitive to the reinfarction rate (baseline 3.83%: ICER $19,326: 6% ICER $120,767) and mortality rate (baseline 6.3%: 6.7% ICER $46,688; 7.2% ICER $197,850) of t-PA. CONCLUSION: t-PA is a cost-effective therapy for MI compared to SK. In addition, despite using costs and utilities from varied sources, and employing a simpler model the findings support previously published results.

**PCV31**

**CLOSURE OF ATRIAL SEPTAL DEFECT: MEDICO-ECONOMIC ARGUMENTS TO CHOOSE BETWEEN INVASIVE SURGERY AND PERCUTANEOUS TECHNIQUE USING SEPTAL OCCLUDER**

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OBJECTIVES: The medical device implantation techniques via percutaneous aboard tend to substitute to surgical techniques, in various cardio-vascular therapeutics. However, prosthesis implantation is often accompanied by high implementation costs (linked to the device acquisition) which are difficult to justify to the decision-maker, in a context of high financial constraint. METHOD: Available clinical data show similarity of effectiveness and complication rates between these two techniques. Therefore, the economic appraisal consists in a cost minimization approach. First, we modeled the two technique protocols before costing each action (personnel, facilities, . . . ) according to the internal costs of Grenoble hospital. Moreover, we estimated the budgetary productivity of these two strategies using the French DRG classification system used to adjust the annual financial allocation of French public hospitals. RESULTS: Results show the percutaneous technique (septal occluder Amplatz®) is dominant (1.5 times less expensive than surgery), mainly by decreasing the hospital stay (two hospitalization days instead of 12 days in the surgery strategy). DRG system classification generates 1473 ISA (hospital productivity index) for the percutaneous technique and 7556 ISA for invasive surgery. CONCLUSIONS: Comparing between cost-minimization technic using internal costs and incremental budgetary impact using French DRG classification, we conclude that the prosthesis implantation via percutaneous aboard is economically dominant (cheaper than invasive surgery) but 5 times less contributive to annual budget allocation. Therefore invitation for the hospital decision-maker to use septal occluders must come with the adaptation to new technologies of financial public allocation using the DRG classification.

**PCV32**

**STRATEGIES FOR IMPROVING COMPLIANCE WITH HMG-COA REDUCTASE INHIBITORS**

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OBJECTIVE: To assess medication compliance and predictors of compliance with HMG-CoA reductase inhibitors for patients following a myocardial infarction (MI) or other atherosclerotic event. METHODS: Patients were identified from a managed care organization (MCO) database who had an MI or other atherosclerotic event in 1997 or 1998 and were continuously enrolled in the MCO for the year following the event. All patient records were collected following guidelines for HEDIS reporting. Pharmacy claims data review identified 216 patients who had at least one prescription filled for a statin. A number of compliance measures were calculated, including the CMA, a continuous multiple-interval measure of medication availability. A multivariate linear regression of CMA included the following independent variables: age, sex, ICD-9 of admission, DRG of admission, statin prescribed, medication days supply dispensed, number of unique medications prescribed, number of unique chronic medications prescribed, and prescription drug copay amount. RESULTS: The mean CMA was 0.820. Regression results (adjusted r-square 0.11) indicate that several factors had potentially large impacts on CMA, but the estimates were associated with large standard errors (age, gender, ICD-9 of admission, DRG of admission, statin prescribed). Four factors with estimates statistically significantly different from zero are as follows (t-statistics in parentheses): days supply (each 30-day increment) 0.116 (3.61), number of concomitant unique medications −0.009 (2.29), number of concomitant unique chronic medications 0.012 (1.83), copay (each $1) −0.007 (2.84). CONCLUSIONS: Compliance with statins was high in this sample, but not ideal (1.0). Strategies for improving compliance that may have merit include: providing patients with 60 or 90-day supplies (rather than 30-day supplies), controlling the number of other medications prescribed and having lower patient copayments for these important medications.

**PCV33**

**COST-ANALYSIS OF CABG SURGERY IN PATIENTS WITH AND WITHOUT RETHORACOTOMY FROM THE HOSPITAL PERSPECTIVE IN GERMANY**

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OBJECTIVES: German hospitals receive the same reimbursement by the statutory health insurance for CABG
surgery irrespective of whether or not a rethoracotomy, which involves higher in-hospital costs, has to be performed following hemorrhage. In order to evaluate the in-hospital costs for CABG with and without rethoracotomy from the hospital perspective, a cost-analysis of CABG surgery was performed. Furthermore, the cost-effectiveness of prophylactic administration of the anti-hemorrhagic agent aprotinin was investigated. METHODS: The detailed resource utilization of 138 CABG patients, 68 with rethoracotomy and 70 without, was analysed based on sample of patient medical records from 7 German hospitals. Resource costs were provided by hospital administrations and supplemented by literature. The overall costs for both groups were then combined with rethoracotomy rates in patients with and without prophylactic administration of aprotinin derived from a published meta-analysis of all relevant clinical trials in open heart surgery. RESULTS: The total in-hospital costs per patient with CABG were on average DM 21,241 and increased to DM 31,326 for a CABG patient requiring rethoracotomy. Besides the costs of the rethoracotomy, the costs of intensive care were the main cost driver in patients with rethoracotomy. The meta-analysis showed with statistical significance that aprotinin can reduce the rethoracotomy rate from 5.0% to 1.8% in patients undergoing heart surgery. When combining the cost data with the results of the meta-analysis, the expected average costs per patient treated with aprotinin (including drug costs) were DM 21,432 compared to DM 21,655 per patient without aprotinin treatment. A cost-effectiveness analysis (costs per patient without rethoracotomy) resulted in a difference of DM 970 in favour of the prophylactic anti-hemorrhagic treatment. CONCLUSION: The analysis showed that CABG patients requiring an additional rethoracotomy generated about 47% higher costs than patients with CABG surgery only. The administration of the anti-hemorrhagic agent aprotinin can be recommended in the light of the reduced complication rate and improved cost-effectiveness of CABG-surgery.

DECISION ANALYSIS MODEL OF ABCIXIMAB, EPTIFIBATIDE OR STANDARD THERAPY IN ELECTIVE STENT PLACEMENT: A CANADIAN PERSPECTIVE
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The use of glycoprotein 2b/3a receptor antagonists has been shown to be beneficial in elective coronary stent implantation. In Canada, the cost of abciximab has limited widespread use in this population. Recently presented data comparing eptifibatide with heparin alone in a similar population has suggested a significant improvement in clinical outcomes with this less expensive agent. There are no trials directly comparing these two agents in the elective stent patient population. OBJECTIVE: The purpose of this study was to assess the cost-effectiveness of abciximab or eptifibatide compared to standard therapy in patients undergoing elective stent placement in a Canadian setting using a decision analysis model. METHODS: Clinical outcome data was abstracted from the Epistent and Esprit trials. Economic data assessing direct costs for coronary intervention procedures and complications was acquired from the London Health Sciences Centre hospital cost database for the period 1998–99. The composite clinical endpoint was freedom from death, myocardial infarction and urgent revascularization at 30 days. The primary study outcome was the incremental cost per event prevented. RESULTS: In the baseline analysis, both agents compared favorably with standard therapy. Abciximab had an incremental cost-effectiveness of $US 10,320 per event prevented. Eptifibatide was less costly and more effective, hence dominant over standard therapy. The baseline analysis yielded a benefit of 6 events per 1,000 patients treated in favour of abciximab over eptifibatide. However the incremental cost per event prevented was $US 125,218, a less favorable value. CONCLUSION: The incremental cost-effectiveness of abciximab compared to eptifibatide was sensitive to the cost of abciximab and to the incidence of myocardial infarctions. A randomized trial comparing abciximab and eptifibatide in elective coronary stent placement is necessary to better assess this issue.

COMPARABILITY OF PUBLISHED STUDIES ON COST-EFFECTIVENESS OF ANTIHYPERTENSIVE THERAPY: DO THE RESULTS HELP THE DECISION-MAKING PROCESS?
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OBJECTIVES: Cost-effectiveness studies can provide valuable information for decision-making processes, where limited resources need to be allocated across a variety of different treatments. However, it is argued that the current methods for conducting and reporting cost-effectiveness results for this purpose are sub-optimal. This literature review and analysis compares the most recent hypertension cost-effectiveness studies. The goal is to contribute information so that future cost-effectiveness studies of hypertension treatments will provide more optimal information for clinicians and other decision-makers for the choice of antihypertensive treatment. METHOD: A literature search of several databases for the years 1995–2000 was conducted using the following keywords: hypertension and cost-effectiveness and/or economics. RESULTS: The search resulted in 89 articles, of which only 11% (10 studies) were true pharmacoeconomic studies that contained actual data analysis. Of the 10 studies, the majority reported outcome measures in terms of cost per life year gained, but usually considered more than one outcome measure. Coronary heart dis-