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.

**PCV35**

**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-
Abstracts

EVALUATION OF COMPLIANCE AND PERSISTENCE WITH HMG-CoA REDUCTASE INHIBITORS AFTER A MYOCARDIAL INFARCTION USING PHARMACY CLAIMS DATA
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OBJECTIVE: To determine compliance and persistence with cholesterol-lowering therapy with HMG-CoA reductase inhibitors (statins) in patients following a myocardial infarction (MI) or other atherosclerotic event.

METHODS: Patients were identified from a Midwestern 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. Patient records were collected following HEDIS reporting guidelines. Pharmacy claims data review identified 216 patients who had at least one prescription filled for a statin. Compliance and persistence were assessed using length of therapy, single-interval medication availability, multiple-refill-interval medication availability, single-interval medication gaps, and multiple-refill-interval medication gaps.

RESULTS: The population was predominantly male (76%) and the mean age was 61 years (SD 10.2 years, range 34 to 77). The cardiovascular events were as follows: 52% MI, 45% coronary atherosclerosis, and 4% other atherosclerotic event. The proportion of patients persistent with statin therapy at 3, 6, 9, and 12 months were 88, 86, 80, and 69 percent respectively. Patients achieved 90% compliance with each refill (SD 25%, median 94) and cumulative compliance for all refills was 83% (SD 24%, median 92). The average single-interval treatment gap was 11 days (SD 28.5 days, median 2 days) while the average cumulative total treatment gap over the study period was 44 days (SD 70 days, median 13 days).

CONCLUSIONS: Compliance with HMG-CoA reductase inhibitors as measured by single-interval and multiple-refill-interval was generally high, but not ideal (100%) following an MI or other atherosclerotic event. These pharmacy claims data may be further analyzed using multivariate regression to determine the impacts of age, sex, diagnosis, number of concomitant medications, medication days supply, type of statin prescribed, and patient copay on compliance and persistence with therapy.

THE COST-EFFECTIVENESS OF STATINS: EVIDENCE FROM THE ACCESS TRIAL
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OBJECTIVE: There are now a host of HMG-CoA reductase inhibitors (statins) for treating persons with elevated cholesterol levels. The objective of this is to determine the relative cost of treatment among statins. METHODS: The ACCESS study was a 54-week open label trial of atorvastatin as compared to fluvastatin, lovastatin, simvastatin and pravastatin. After a screening phase and a lead-in phase, patients were treated to NCEP target LDL-C levels with statins, starting at the lowest dose level. At six-week intervals (weeks 6, 12, 18) patients who had not yet reached their LDL-C target were titrated up to the next dose level, to a maximum of 40–80 mg, depending on the statin. Costs of services used were recorded, including: study medications, physician visits, laboratory and diagnostic tests associated with cholesterol treatment and other medical services associated with adverse events. RESULTS: A total of 3916 patients were enrolled in ACCESS, with 3262 patients completing the study. Patients treated with atorvastatin had the highest rate of NCEP goal achievement (76.3% v. 34.2%–57.9%; P < 0.01 for each comparison). As a result of NCEP goal achievement, atorvastatin-treated patients required the fewest physician visits through weeks 6–18 (2.81 v. 2.95–3.45; p < 0.01 for each comparison) and the lowest direct study cost per patient achieving NCEP goal ($915 v. $1393–$2421; p < 0.01 for each comparison)—the ultimate measure of cost-effectiveness. CONCLUSIONS: The ACCESS trial demonstrates that treatment with atorvastatin yielded the highest proportion of patients reaching NCEP LDL-C goals at the lowest cost per patient.