

LDL-C reduction of \$17.12. In comparison, the costs per percent LDL-C reduction for equipotent strengths of other statins were fluvastatin 80mg at \$17.93, simvastatin 20mg at \$36.84, pravastatin 40mg at \$37.66 and lovastatin 40mg at \$47.29. Acquisition costs per unit for these agents were \$1.78, \$1.72, \$3.53, \$3.51 and \$4.02, respectively. **CONCLUSION:** Acquisition cost is one component in evaluating cost of therapy. However, in this analysis, among equipotent agents, the agent with the lowest acquisition cost was not the most cost effective. Attempts to quantify cost effectiveness should be made when reviewing the statin class.

PCV36

COST-EFFECTIVENESS OF TREATING BY SIMVASTATIN 40 MG/DAY HIGH VASCULAR RISK PATIENTS: AN ECONOMIC EVALUATION BASED ON THE HEART PROTECTION STUDY

Fagnani F¹, Lafuma A², Souchet T³

¹CEMKA, Bourg la Reine, France; ²CEMKA-EVAL, Bourg La Reine, France; ³Merck Sharp & Dohme-Chibret, Paris, France

OBJECTIVES: Estimate the cost-effectiveness ratio in France of treating high vascular risk patients with simvastatin. **METHODS:** Data on efficacy and resources consumed were extracted from the published results of the MRC/BHF Heart Protection Study (HPS) performed in UK. HPS compared the occurrence of total and CHD deaths, major vascular events (MVE), and major coronary events (MCE) in more than 20,000 patients with high vascular risk (patients with diabetes, history of stroke or other cerebrovascular disease, peripheral arterial disease, or with CHD). Patients were randomly assigned to receive simvastatin or placebo and followed at least for five years. The cost-effectiveness analysis was performed using French unit costs. The survival benefit over the study period was estimated from the HPS results. Direct costs included the extra costs of simvastatin and the benefit associated with avoided vascular events. Indirect costs were not considered. Costs and benefit were discounted at 5%. **RESULTS:** All-cause mortality was reduced by 13% (RR = 0.87, p = 0.0003). There was a discounted survival benefit of 0.040 year per included patient. There were highly significant reductions of about one quarter in the risk of first event rate of MVE (RR = 0.76, p < 0.0001) and of MCE (RR = 0.73, p = 0.0001). The absolute value of the percentage of avoided event during the 5-year period in the simvastatin group was 5.4% for any major vascular event, 2.1% for non fatal MI, 1.3% for non fatal stroke, 2.4 % for revascularisation, 1.2% for fatal MI and 0.2% for fatal stroke. The discounted extra cost of simvastatin was estimated at €1994 (\$1 = €1) taking into account the statins used in the placebo group. This cost was reduced to €1031 by considering the direct cost associated with avoided vascular events. Cost-effectiveness ratio was then estimated at €23,678 per life year gained (€22,000 to €50,000 in the different subcategories of patients, ratios well accepted as being cost-effective). **CONCLUSIONS:** Treat-

ment with simvastatin in different subcategories of patients with high vascular risk is cost-effective in the French setting.

PCV37

BASELINE PREDICTORS OF ONE-YEAR COSTS AFTER ACUTE MYOCARDIAL INFARCTION IN THE ELDERLY

Liao L¹, Bundorf MK², Kauf T³, Schulman KA¹, Whellan D⁴, Jollis J¹

¹Duke University Medical Center, Durham, NC, USA;

²Stanford University, Stanford, CA, USA; ³Duke University,

Durham, NC, USA; ⁴Duke Clinical Research Institute, Durham, NC, USA

OBJECTIVES: Studies examining costs following myocardial infarction (MI) have been limited by short follow-up, small sample sizes, restricted patient populations, or failure to include hospital, physician, or market characteristics. In a national sample with extensive supplemental data, we sought to identify the baseline factors predicting higher costs in the year following MI. **METHODS:** Elderly acute MI patients totaling 84,373 (90% white, 49% female) in the Cooperative Cardiovascular Project were linked to Medicare Part A claims, AHA Hospital Surveys, the CMS directory of physician specialties, and the CMS Hospital Wage Index File. Medicare charges were converted to costs using institutional cost to charge ratios. Associations with admission episode and one-year log-transformed costs were assessed by regression analysis with robust standard errors. **RESULTS:** Mean cost was \$12,956 (median \$8,833) for the admission episode and \$19,597 (median \$13,583) at one year. Patient characteristics accounted for 11% of the admission and one-year cost variation. Patient variables most highly associated with one-year costs included anterior MI, CHF, COPD, renal insufficiency, diabetes, and shock. Older age (age 80 years) was most strongly associated with lower costs. After adding hospital, physician, and market variables, the models explained 22% of admission and 17% of the one-year cost variation. Teaching hospitals and care by a cardiologist were both associated with higher one-year costs. While patient death was associated with lower admission episode costs, death after the initial episode was associated with higher one-year costs. **CONCLUSION:** In models examining the baseline predictors of one-year costs following MI, patient characteristics account for approximately twice the cost variation accounted for by other baseline variables.

PCV38

A COST AND COST-EFFECTIVENESS (CE) ANALYSIS OF ANGIOTENSIN CONVERTING ENZYME (ACE) INHIBITOR TRANDOLAPRIL IN THE TREATMENT OF POST INFARCTION IN THE US

Lilliu H¹, Le Pen C¹, Lamiraud K¹, Wittenberg W²

¹Clp-santé, Paris, France; ²Abbott GmbH & Co KG, Ludwigshafen, Germany