

with chronic left ventricular dysfunction at increased risk for sudden cardiac death as compared to current risk stratification methods for selection of patients for implanted cardiac defibrillators (ICD) versus medical therapy. **METHODS:** A Markov model was developed to evaluate the impact of using AdreView for evaluating NYHA II or III heart failure (HF) patients with LV ejection fraction (EF) <50% for treatment with an ICD. AdreView risk-stratification was used to guide the treatment decision between ICD and medical therapy. The source of data for predicted probabilities, expected mortality rates, and treatment costs in year 2009 dollars are from the published literature and the AdreView Myocardial Imaging for Risk Evaluation in Heart Failure (ADMIRE-HF) study. The model was developed from a societal perspective using a one-month cycle time, 3% discount rate and a lifetime time horizon. Sensitivity analysis was completed on cost, efficacy and relative risk ratios. **RESULTS:** AdreView had an incremental cost-effectiveness ratio (ICER) of \$100,910 versus standard stratification methods. The number needed to screen to prevent one death over 5 years was 20. The model was sensitive to changes in utility values (\$91,737–\$112,123 / QALY), efficacy of ICD in low risk patients (\$95,805–\$107,388 / QALY) and efficacy of ICD in high risk patients (\$81,578–\$166,086 / QALY). The model was not sensitive AdreView cost, even at 200% of baseline (\$104,068 / QALY). **CONCLUSIONS:** AdreView is a relatively cost-effective screening strategy versus current methods that can prevent sudden cardiac deaths within as few as 20 patient screenings. Further research on the use of AdreView in real-world settings is warranted.

PCV72

COST-EFFECTIVENESS OF ROSUVASTATIN FOR THE PRIMARY PREVENTION OF VASCULAR EVENTS ACCORDING TO FRAMINGHAM RISK SCORE IN PATIENTS WITH AN ELEVATED C-REACTIVE PROTEIN
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OBJECTIVES: Compare the cost-effectiveness of rosuvastatin versus standard management according to Framingham risk for the primary prevention of vascular events in JUPITER-like patients that had LDL levels less than 130 mg/dL and CRP levels of 2.0 mg/L or higher. **METHODS:** TreeAge Pro 2009 software was used to design 2 Markov-type models from a third party payer perspective to calculate the incremental cost-effectiveness ratio (ICER) of rosuvastatin 20 mg versus standard management over 10 years in patients with a Framingham Risk Score greater than 10% and less than or equal to 10%. Cost data were obtained from CMS and the Redbook. Quality of life measures were obtained from the literature. Event data were obtained directly from the JUPITER Study Group. One-way sensitivity analysis and probabilistic sensitivity analysis were conducted on many possible ranges of cost, quality of life measures, and event rates. **RESULTS:** Treating patients with rosuvastatin to prevent vascular events would result in an estimated ICER of \$37,232/QALY and \$95,000/QALY in those with Framingham Risk Scores greater than 10%, and less than or equal to 10%, respectively. Results of 1-way sensitivity analysis were especially sensitive to the price of the rosuvastatin and the probability of a primary endpoint event in the standard management group. Results of a probabilistic sensitivity analysis suggest that in patients with a Framingham score greater than 10%, the probability that rosuvastatin would be considered cost-effective at a \$50,000/QALY threshold is approximately 97.5%. In those patients with a Framingham Risk Score less than or equal to 10%, the probability that rosuvastatin would be considered cost-effective is less than 1%. **CONCLUSIONS:** Compared with standard management practices, statin therapy with rosuvastatin may be a cost-effective strategy over a 10-year time horizon for preventing vascular events in patients with a Framingham Risk Score greater than 10% that have normal LDL levels and elevated CRP levels.

PCV73

CONSIDERING THE COST-EFFECTIVENESS OF STATINS IN FAMILY PRACTICE IN TURKEY FROM A PAYER PERSPECTIVE

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OBJECTIVES: In Turkey, there is Atorvastatin, Fluvastatin, Pravastatin, Rosuvastatin and Simvastatin in the statin market. And all statins are reimbursed by health insurance companies. The aim of this study is to determine the cost-effective statins which are reimbursed by the Social Security Foundation, the biggest reimbursement foundation in Turkey. **METHODS:** A cost-effectiveness analysis was designed from the perspective of the insurance company view. For insurance company data; Social Security Foundation which is the biggest reimbursement foundation in Turkey was chosen. The assumed treatment protocol depended on the one in the Republic of Turkey Health Ministry Primary Care Diagnosis and Treatment Guide which was published in 2003. The values of the mean effectiveness of statins are taken from a published meta-analysis. **RESULTS:** Simvastatin had the lowest cost in the first year of therapy (\$166), followed by pravastatin (\$300), fluvastatin (\$365), rosuvastatin (\$437) and atorvastatin (\$448). When the drugs were compared for the incremental cost-effectiveness, simvastatin dominated pravastatin and fluvastatin, whereas rosuvastatin dominated atorvastatin. The first year incremental cost of rosuvastatin was \$271 compared to simvastatin, or \$30 per additional 1% reduction in LDL-C, \$225 per additional 1% increase in HDL-C and \$1856 per additional patients to ATP II goal. **CONCLUSIONS:** Because simvastatin had a lower acquisition cost than all statins and its all dosages cost approximately 1/3 of the nearest alternative statin, in our base case and alternative scenarios simvastatin was the least costly alternative. Thus depending on actual acquisition prices and following costs such as doctor visits and laboratories the payer may achieve substantial cost savings and greater effectiveness by using rosuvastatin or simvastatin instead of these agents in Turkey. Therefore,

simvastatin and rosuvastatin comprise of the optimal two statin formulary. Formulary decision based on these results should be revisited periodically, as new pricing, outcomes and safety data become available.

PCV74

COST-EFFECTIVENESS OF STATIN THERAPY FOR THE PRIMARY PREVENTION OF CARDIOVASCULAR EVENTS PREDICTED BY THE REYNOLDS RISK SCORE IN HEALTHY MEN AND WOMEN AGED 40 TO 80 YEARS OF AGE

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OBJECTIVES: To evaluate the cost-effectiveness of treating patients without traditional risk factors for cardiovascular disease with statins. **METHODS:** Cost-effectiveness was evaluated using a backward induction model. A hypothetical cohort of men and women aged 40 to 80 years was evaluated for their first acute myocardial infarction (AMI) or cardiovascular accident (CVA). The Reynolds Risk Score (RRS) was used to generate event risks and risk reductions as the impact of therapy on lipids and c-reactive protein (CRP) could be calculated independently. Covariates for the RRS were adapted from the JUPITER trial and national health statistics. Life expectancies, quality of life adjustments, and event costs for AMI and CVA were ascertained from the primary literature. Direct and indirect treatment costs were based on the primary literature, Adult Treatment Panel III (ATPIII) protocols and the Bureau of Labor Statistics. Medication costs were adapted from the Federal Supply Schedule. Costs were inflated to 2009 US\$ using the medical component of the CPI and discounted at a rate of 3%. A sensitivity analysis was also performed. **RESULTS:** Using a threshold of \$150,000 per QALY, treatment was cost-effective with generic statins in all men and women, aged 40 to 80 years when both CRP and LDL levels were affected. It was cost-effective to treat men >60 years with a hypothetical medication that only affected CRP levels. In the base case (65 year old men/women), the model was sensitive to adherence, smoking status (women), premature family history of AMI, brand rosuvastatin price, and the level of LDL reduction. **CONCLUSIONS:** In this population, it is cost-effective to treat all patients for the primary prevention of AMI and CVA with a generic statin that confers therapeutic benefits similar to what was modeled in this study. Selectively lowering CRP levels is only cost-effective in males >60 years.

PCV75

ROBUST UNIVARIATE AND MULTIVARIATE SENSITIVITY ANALYSIS CONFIRM THAT ENOXAPARIN IS COST-SAVING TO THE PAYERS COMPARED WITH UFH FOR VTE PREVENTION IN PATIENTS WITH ISCHEMIC STROKE: ANALYSIS OF THE PREVAIL DATA

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OBJECTIVES: A decision-analytic model using cost data and clinical information from the PREVAIL study showed that enoxaparin was cost-saving from the payer perspective compared with unfractionated heparin (UFH) for the prevention of venous thromboembolism (VTE) in patients with acute ischemic stroke (overall costs of clinical events plus drug costs: \$2018 vs. \$2913, respectively; difference \$895 per patient). To test the robustness of the cost difference of enoxaparin versus UFH for VTE prevention after an acute ischemic stroke, univariate and multivariate sensitivity analyses were performed. **METHODS:** In the univariate analysis, the payer cost (2007\$) for each clinical event (deep-vein thrombosis [DVT], pulmonary embolism [PE]; intracranial hemorrhage [ICH], major extracranial hemorrhage [MjEH] and minor extracranial hemorrhage [MnEH]) was adjusted individually, increasing or decreasing by 20%, while other parameters (drug costs, event rates) remained unchanged. The multivariate analysis was a Monte Carlo simulation (Crystal Ball software), where all the parameters were simultaneously varied in a random fashion within a range of ± 20% over 10,000 trials. **RESULTS:** The cost of DVT was \$13,499. When increased by 20% to \$16,199, the difference between UFH and enoxaparin groups was \$1,104; when decreased by 20% to \$10,799, the difference was \$686. The baseline costs were \$20,635 for PE, \$26,037 for ICH, \$22,765 for MjEH and \$815 for MnEH. When these were increased by 20%, the difference between enoxaparin and UFH groups was \$928, \$907, \$859 and \$896, respectively. When decreased by 20%, the difference was \$862, \$883, \$932 and \$894. Using the Monte Carlo simulation multivariate analysis, the difference varied between \$615 and \$1,177, with mean (SD) \$896 (\$91) and median of \$897. Enoxaparin was less costly than UFH across all analyses, with DVT being the main cost driver. **CONCLUSIONS:** Univariate and multivariate sensitivity analysis confirmed that enoxaparin is more cost-saving than UFH for VTE prevention after an acute ischemic stroke.

PCV76

SYSTEMATIC REVIEW OF ECONOMIC EVALUATIONS OF SELECTED CARDIAC IMAGING TECHNOLOGIES IN THE DIAGNOSIS OF CORONARY ARTERY DISEASE

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OBJECTIVES: To identify, retrieve, and summarize studies evaluating the cost-effectiveness of selected cardiac imaging tests for the diagnosis of CAD. **METHODS:**