mortality data. Study cohort was statin-naïve patients initially prescribed statin therapy from January 2003–July 2011, and registered within the practice for ≥1 year preceding statin initiation. High-dose was defined as simvastatin 80mg, fluvastatin 80mg, atorvastatin>20mg, rosuvastatin>10mg. Adjusted Cox regression models were used to predict factors associated with discontinuation and CV event risk. **RESULTS:** Only 2% (4,744/218,808) of patients started on a high-dose statin; 4,399/4,744, (93%) on atorvastatin, a third taking atorvastatin 80mg. Adherence was high based on prescribed medication possession ratio for high- (0.96, SD:0.08) and low-dose (0.95, SD:0.10) initiation. Initial dose was not a predictor of discontinuation in the overall population (HR:0.96 95%CI:0.91-1.02), but in patients with CV history, high-dose initiation was associated with lower discontinuation risk (HR:0.87 95%CI 0.78-0.96). In the overall population increased CV event rates were associated with initiation of high-dose statin (OR:2.07 95%CI:1.78-2.41), greater Framingham risk (OR:1.50 95%CI 1.44-1.56), prior unstable angina (OR:3.06 95%CI:2.53-3.71), heart failure (OR:2.73 95%CI:2.13-3.51), and myocardial infarction (MI) (OR:4.29 95%CI:3.56-5.17). In the CV subgroup, only prior MI was associated with increased CV event risk (OR:1.26 95%CI:1.03-1.55). **CONCLUSIONS:** Initial high-dose statin was not associated with lower adherence or persistence; among patients with CV history, risk of discontinuation was significantly lower. The association of initial high-dose statin treatment with higher CV event rates may be due to background risk factors leading to use of high-dose statin.

PCV15

EFFICACY AND SAFETY OF ADDITIONAL LINEAR ABLATION WITH PULMONARY VEIN ISOLATION FOR THE RHYTHM CONTROL OF ATRIAL FIBRILLATION: A META-ANAYSIS OF RANDOMIZED CONTROLLED TRIALS

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OBJECTIVES: Many new catheter ablation (CA) methods based on pulmonary vein isolation (PVI) have been developed. The aim of this study was to assess the benefits and harms of additional linear ablation with PVI/ circumferential pulmonary vein ablation (CPVA) in comparison with PVI/CPVA in patients with AF. **METHODS:** Ovid-Medline, Ovid-EMBASE, Cochrane library, and seven Korean medical databases were searched to identify studies through May, 2012. To assess the quality of randomized controlled trials (RCTs), the Cochrane risk of bias tool was used. Data were independently extracted by two reviewers using a standardized form. Disagreements between reviewers were resolved by discussion and consensus. The dichotomous data were presented as pooled relative risk (RR) with 95% confidence intervals (CI) using random-effects model. **RESULTS:** A total of 12 RCTs (1,226 patients) were included and of poor quality. Differences between groups of all-cause mortality were not reported in 12 RCTs. PVI/CPVA plus additional linear ablation, in comparison with PVI/CPVA, increased freedom from atrial tachycardia (AT)/AF (RR 1.10, 95% CI 0.97-1.25, I^2=64%) in 12 RCTs, but there was insignificant and moderate heterogeneity among trials. The RR of stroke, transient ischemic attack (TIA) or thrombo-embolic events between both groups was 0.75 (95% CI 0.20-2.81, I^2=0%). Fewer complications and adverse events were reported in the trials and there were no differences. **CONCLUSIONS:** The results of meta-analysis showed a trend of favor of PVI/CPVA plus additional linear ablation for freedom from AT/AF, and similar result in the rates of stroke, TIA or thrombo-embolic events. There is limited evidence to suggest that PVI/CPVA plus additional linear ablation may be a better treatment option compared to PVI/CPVA in patients with AF. Well-designed, adequately powered, and long-term clinical trials are warranted.

PCV16

EFFECT OF STATINS FOR PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE AMONG ELDERLY

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OBJECTIVES: Statin treatment has been shown to be effective in secondary prevention for vascular events among patients with established cardiovascular diseases (CVD). However, its effectiveness of primary prevention for CVD on the elderly is unknown. The aim of this study was to examine whether statins are effective in reducing CVD risk among the elderly without medical history of CVD. **METHODS:** We used population-based National Health Insurance Database to conduct a retrospective cohort study. We identified 5374 lipid-lowering drugs users aged over 55 years old who were first-time users of statin or lowering cholesterol medications for primary prevention purpose between year 2000 and 2003. We used cox proportional hazard model to analyze the risk of coronary artery heart disease, cerebrovascular disease or peripheral arterial occlusion disease during follow-up time. Interaction terms of age and statins were included in the model to examine the heterogeneous effect of statins across age groups. We used propensity score to adjust the potential self-selection effect of using statins on CVD risks. **RESULTS:** During the 6-10-year follow-up period, 2944 patients experienced new-onset CVD. The statins users had lower risk for CVD events compared to non-statin lipid-lowering drug users (adjusted hazard ratio 0.86; 95% CI, 0.78-0.93; P=.0005). The age/statin interaction term was not statistically significant (P=.5562). **CONCLUSIONS:** Statin therapy was effective in preventing new onset of CVD among the elderly patients.

PCV17

ATTAINMENT OF LDL-CHOLESTEROL GOALS IS SUBOPTIMAL WITH ROSUVASTATIN MONOTHERAPY IN US PATIENTS AT HIGH CARDIOVASCULAR RISK

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OBJECTIVES: Statins are the first recommended pharmacotherapy to lower LDL-C, with rosuvastatin as the most potent available statin. Clinical outcomes are improved with statin use in patients at high risk for cardiovascular disease (CVD). Guidelines recommend specific LDL-C goals for patients dependent on pre-existing CV risk factors. The present analysis examined LDL-C goal attainment in US patients at high CV risk treated with rosuvastatin monotherapy. **METHODS:** In a retrospective study using the GE Healthcare Centricity database, patients who received a prescription (Rx) for rosuvastatin monotherapy (index Rx) between January 1, 2008 and December 31, 2010 were identified. Included were patients with coronary heart or atherosclerotic vascular disease, ≥1 LDL-C measurement between 3 months and 1 year post-index Rx, and medical records for 1 year prior to and following index Rx. Proportions of patients attaining LDL-C <70 and <100 mg/dL were estimated for all patients, as well as by rosuvastatin daily dose. **RESULTS:** Of 6004 patients (age=66 yrs [SD 10]; 56% males), 15%, 39%, 29%, and 17% received Rxs for 5, 10, 20 and 40 mg rosuvastatin, respectively. Overall, mean follow-up LDL-C was 89 mg/dL (SD 37); only 32% of patients had an LDL-C <70 mg/dL and 72% had an LDL-C <100 mg/dL. By increasing dose, mean LDL-C decreased and proportions at goal generally increased. For goal of LDL-C <70 mg/dL, 39% of all patients had a follow-up LDL-C ≥20 mg/dL above this goal, while 16% had an LDL-C ≥20 mg/dL above the 100 mg/dL goal. **CONCLUSIONS:** The proportion of patients at high CV risk achieving recommended LDL-C goals with rosuvastatin monotherapy was suboptimal, with more than 63% not achieving the current optional LDL-C goal of <70 mg/dL across doses. This suggests a treatment gap and more effective lipid-lowering strategies, such as aggressive dose titration or additional therapies, are warranted in this high-risk population.

PCV18

VARIATION IN STATIN INTENSITY PRESCRIBING POST-ACUTE MYOCARDIAL INFARCTION BY BASELINE PATIENT COMPLEXITY

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OBJECTIVES: Despite evidence from randomized controlled trials which show that treatment with high-intensity statins can result in an additional 16% reduction in CVD events compared to moderate-dose statins, only 20-25% of very high risk patients receive high-intensity statins. Geographic variation in statin prescribing, in addition to the existence of a “treatment risk paradox” in which complex patients with apparently more to gain from treatment are less likely treated, may be associated with this low rate. Our objective is to determine whether there is an association between patient complexity and the intensity of statin treatment following acute myocardial infarction (AMI) by geographical region. **METHODS:** This was a retrospective cohort study of 124,397 Medicare patients with fee-for service Part A and B, and the Part D benefit who were hospitalized with AMI in 2008 or 2009. Patient complexity was defined by the presence or absence of diabetes, heart failure, and chronic kidney disease in the year prior to admission. Treatment with atorvastatin 40,80mg; and rosuvastatin 20,40mg in the first thirty days post discharge was defined as high-intensity; other statin treatment as low/moderate intensity, and the absence of a fill as no treatment. Area treatment rates (ATRs) adjusted for baseline patient characteristics were calculated and grouped into quintiles of “no treatment”, “low/moderate”, and “high” treatment areas. Tables were generated calculating statin intensity treatment rates by comorbidity-based AMI patient complexity. **RESULTS:** Those patients with no evidence of any complex conditions have the lowest "no treatment" rates (36.4%), while the highest "no treatment" rates occur among those with all three conditions (54.2%). Substantial geographic variation in the intensity of statin treatment within patient complexity subgroups is revealed using the ATR method. **CONCLUSIONS:** Despite guidelines promoting the use of high-intensity statins, more complex patients are less likely to be treated and treatment discretion is revealed in the geographic variation.

PCV19

META-ANALYSIS FOR SAFETY OF DABIGATRAN AND WARFARIN FOR TREATMENT OF ATRIAL FIBRILLATION

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OBJECTIVES: Atrial fibrillation (AF) is an irregular and often rapid heart rate that commonly causes poor blood flow to the body. Dabigatran and Warfarin have shown safety and efficacy for treatment of AF. The objective of this study was to conduct meta-analysis and present evidence for safety of Dabigatran versus Warfarin for treatment of AF. **METHODS:** For this meta-analysis we included randomized controlled trials (RCTs) evaluating Dabigatran for the treatment of AF. We included studies that were: 1) a RCT in humans; 2) an investigation of patients with nonvalvular atrial fibrillation; 3) an evaluation of dabigatran compared with warfarin or each other; and 4) a report of results of stroke or systemic emboli and major bleeding. A systematic literature search for dabigatran trials was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar, and Cochrane. Data was collected for the study size, interventions, year and total bleeding events. For meta-analysis, random effects and fixed effects models were used to obtain cumulative statistics. **RESULTS:** Two RCTs with a total of 12,268 patients were identified. The pooled event rate for Dabigatran for total bleeding events was 31.9% (95% CI 31%-33%). The pooled response rate for Warfarin for total bleeding events was 35.1% (95% CI 34%-37%). The cumulative relative risk for total bleeding events with Dabigatran versus Warfarin was 1.1 (95% CI 1.08-1.12). **CONCLUSIONS:** Meta-analysis shows Dabigatran has a slightly lower rate of total bleeding events compared to Warfarin.