fenofibrates (4%), diltiazem hydrochloride (3%), niacin (2%), verapamil hydrochloride (1%), fluconazole (1%), gemfibrozil glucuronide (1%), amiodarone (1%), ketoconazole (1%), and clarithromycin (1%). The proportion of patients prescribed with CMs that potentially interact with statins was generally higher in patients with ≥5 CMs. **CONCLUSIONS:** The majority of statin users in this study were taking ≥5 CMs. Statin users with ≥5 CMs were more likely to be female and ≥65 years old. Use of CMs that potentially interact with statins is not uncommon and more prevalent in those using ≥5 CMs.

PCV135

LOW LIPOPROTEIN CHOLESTEROL GOAL ATTAINMENT IN DYSLIPIDEMIC PATIENTS WITH EXISTING STATIN THERAPY: A CHART EXTRACTION-BASED APPROACH

Ivanova J[1], Frois C[2], Bae JP[3], Boykin SD[3], Mccracken R[4], Molife C[3], Waldman T[2], Zhao Z[3]
[1]*Analysis Group, Inc., New York, NY, USA,* [2]*Analysis Group, Inc., Boston, MA, USA,* [3]*Eli Lilly and Company, Indianapolis, IN, USA,* [4]*i3 Statprobe, Ann Arbor, MI, USA*

OBJECTIVES: To evaluate the proportion of patients initiating statins achieving NCEP ATP III low-density lipoprotein cholesterol (LDL-C) goals. **METHODS:** Adults ≥18 years of age, initiating statins (atorvastatin, rosuvastatin, simvastatin, pravastatin, fluvastatin, or lovastatin) between January 1, 2009 through September 30, 2009 with no use of the index statin 3 months prior to initiation were identified via retrospective physician survey/chart extraction. LDL-C goal attainment was evaluated based on: 1) LDL-C lab values extracted from patients' medical charts at 6 weeks, 12 weeks, 6 months, and 12 months after statin initiation, and 2) physician's assessment. Secondary endpoints included the proportion of patients with HDL-C >40 mg/dL (male) and >50 mg/dL (female), and non-HDL-C goal within 12 months. Subgroup analyses were conducted among 4 different populations: patients with 1) prior CHD; 2) diabetes without CHD; 3) other CHD risk equivalents excluding diabetes or CHD; and 4) multiple (≥3) concomitant medications. **RESULTS:** A cohort of 869 patients was identified with mean age of 52 years, mean baseline LDL-C of 162 mg/dL, HDL-C of 40mg/dL, and non-HDL-C of 206 mg/dL. The proportions of patients achieving LDL-C goal based on lab values were 38%, 59%, 66% and 74% at 6 weeks, 12 weeks, 6 months, and 12 months, and were similar based on physician assessment. The proportion of patients with HDL-C >40 mg/dL (male) was 68%, >50 mg/dL (female) was 44%, and 68% of patients reached non-HDL-C goal. The proportions of patients achieving LDL-C goal in subgroup populations were 22%, 41%, 52%, 63% in patients with CHD; 17%, 39%, 45%, 55% in patients with diabetes; 20%, 34%, 52%, 60% in patients with other CHD risk equivalents; and 26%, 48%, 60%, 70% in patients with multiple concomitant therapies. **CONCLUSIONS:** A low percentage of patients achieved LDL-C goal after 1 year; particularly in patients with diabetes and other CHD risk equivalents.

PCV136

FACTORS ASSOCIATED WITH FAILING TO ACHIEVE LOW DENSITY LIPOPROTEIN CHOLESTEROL GOAL WITH EXISTING STATIN THERAPY: A CHART EXTRACTION-BASED APPROACH

Zhao Z[1], Ivanova J[2], Bae JP[1], Boykin SD[1], Mccracken R[3], Molife C[1], Waldman T[4], Frois C[4]
[1]*Eli Lilly and Company, Indianapolis, IN, USA,* [2]*Analysis Group, Inc., New York, NY, USA,* [3]*i3 Statprobe, Ann Arbor, MI, USA,* [4]*Analysis Group, Inc., Boston, MA, USA*

OBJECTIVES: Understand the factors associated with failing to achieve NCEP ATP III low-density-lipoprotein cholesterol (LDL-C) goals. **METHODS:** Adults ≥18 years of age, initiating statins (atorvastatin, rosuvastatin, simvastatin, pravastatin, fluvastatin, or lovastatin) between 1/1/2009 through 9/30/2009 with no use of the index statin 3 months prior to initiation were identified via retrospective physician survey/chart extraction. Risk factors associated with failing to achieve LDL-C goal were identified using 1) direct physician assessment and 2) logistic regression analysis. Physician assessment was reported for all patients as well as 4 subgroups (patients with CHD, type 2 diabetes without CHD, other CHD risk equivalents excluding diabetes, and multiple [≥3] concomitant therapies). **RESULTS:** A cohort of 869 patients was identified (mean age 52 years). Twenty-four percent of patients were unable to achieve LDL-C goal within 1 year after statin initiation. Based on physician assessment, 45% did not achieve LDL-C goal due to poor adherence to statin therapy, 35% for lifestyle changes, 26% for no/slow improvement on statin therapy, and 14% for adverse events (e.g., myalgia) with statin therapy. Reasons (poor adherence to statin therapy, lifestyle changes, no/slow improvement, and adverse events) for not achieving LDL-C goal differed among subgroups: CHD subgroup 36%, 38%, 26%, 14%; diabetes subgroup 32%, 24%, 32%, 21%; other CHD risk equivalents subgroup 39%, 29%, 50%, 18%; multiple concomitant therapies subgroup 36%, 30%, 39%, 15%. The logistic regression model indicated index statin, older age, non-adherence to statin, having diabetes or other CHD risk equivalents, smoking, high baseline LDL-C, and low baseline HDL-C were significantly ($P<0.05$) associated with failing to achieve LDL-C goals. **CONCLUSIONS:** This retrospective chart review identified poor adherence to statin therapy, underlying clinical conditions (diabetes or other CHD risk equivalents), adverse events such as myalgia, smoking, baseline high LDL-C, and low HDL-C as factors associated with failure to achieve LDL-C goals.

PCV137

THE IMPACT OF DEMENTIA ON CARE PATTERNS AFTER DISCHARGE FOR ACUTE CORONARY SYNDROMES UNDER NATIONAL HEALTH INSURANCE SYSTEM

Lin CF[1], Hsiao FY[2], Bai CH[3], Gau CS[2], Shen LJ[2]
[1]*National Taiwan University, Taipei , Taiwan,* [2]*National Taiwan University, Taipei, Taiwan,* [3]*Taipei Medical University, Taipei, Taiwan*

OBJECTIVES: The prevalence of dementia is growing considerately in the recent years. Little is known about how dementia affects care patterns after discharge for acute coronary syndromes. This study was designed to assess differences between care patterns for ACS patients with and without dementia. **METHODS:** We conducted a retrospective cohort study of 87298 patients hospitalized for ACS (1835 with dementia) from January 1, 2006 to December 31, 2007, based on a nationwide population-based data under national health insurance system. Primary outcomes were use of aspirin, beta-blocker, angiotensin-converting enzyme inhibitors (ACEI) or angiotensin receptor blocker (ARB), statin, and clopidogrel within 365 days after the first ACS event. Secondary outcomes were implementations of invasive procedures. Age-matched cohort at 1:2 ratio (N=5005) was identified to control for confounding variable age. Multivariate logistic regression was performed to examine the relationships between the diagnosis of dementia in ACS patients and their care patterns. **RESULTS:** ACS patients with dementia were less likely to receive aspirin (adjusted odds ratio (OR), 0.71; 95% CI, 0.64-0.78, $p<0.001$), beta-blocker (adjusted OR, 0.68; 95% CI, 0.61-0.75, $p<0.001$), ACEI or ARB (adjusted OR, 0.70; 95% CI, 0.64-0.78, $p<0.001$), statin (adjusted OR, 0.57; 95% CI, 0.50-0.64, $p<0.001$), and clopidogrel (adjusted OR, 0.84; 95% CI, 0.74-0.95, $p=0.007$) after the first ACS event compared with ACS patients without dementia. They were also less likely to underwent invasive procedures such as percutaneous transluminal coronary angioplasty (PTCA) (adjusted OR, 0.57; 95% CI, 0.51-0.64, $p<0.001$), coronary artery bypass graft (CABG) (adjusted OR, 0.31; 95% CI, 0.20-0.48, $p<0.001$), and revascularization (adjusted OR, 0.52; 95% CI, 0.47-0.59, $p<0.001$) during the first ACS event. Similar results were found in the age-matched cohort. **CONCLUSIONS:** The presence of dementia was associated with underutilization of evidence-based therapies in ACS patients. Influence of suboptimal treatments in ACS patients with dementia should be further evaluated.

PCV138

USING A POPULATION- BASED, BUDGET- CONSTRAINED, COST-EFFECTIVENESS MODEL TO ASSESS THE HEALTH AND ECONOMIC IMPACTS OF USING STATINS FOR PRIMARY PREVENTION BASED ON THE JUPITER TRIAL INTENDED USE POPULATION

Arbel R, Greenberg D
Ben-Gurion University of the Negev, Beer-Sheva, Israel

OBJECTIVES: New treatment modalities may improve health outcomes but are usually associated with substantial cost and budget impact, thus limiting the number of patients that may benefit from them. An alternative is implementing a substantially lower cost intervention to a much wider population, accepting inferior per-patient outcomes. We examined whether this approach can provide better outcomes under a pre-specified budget constraint. **METHODS:** We used the results from the JUPITER trial (Justification for the Use of Statins in Prevention: An Intervention Trial Evaluating Rosuvastatin) and the United-States target population as a case study. The target population is estimated at 6,700,000 patients: women >60; men >50, with normal LDL but elevated high sensitive C Reactive Protein levels. We built a model that can compare the outcomes on the entire intended-use population, and compared three treatment alternatives: 1) Rosuvastatin for a limited patient population, with the clinical effect reported in JUPITER; and 2) Lowest cost statin for most patients, with 75% of the JUPITER effect per patient; and 3) Usual care (do-nothing) as a baseline for cost and effectiveness. We used a budget constraint of $200M per year, which covers the lowest cost statin for 75% of the target population, and used a 5-year horizon, during which a potential of 268,000 Cardiovascular adverse events could be prevented. **RESULTS:** The budget allows for 3% of the target patient population to be treated with Rosuvastatin, which resulted in prevention of 7229 cardiovascular events as compared to usual care. Using the lowest-cost statin allows for 75% of the target patient population to be treated results in preventing 118,555 cardiovascular events and is cost-saving compared to usual care. **CONCLUSIONS:** Under budget constraints, using lowest-cost statins enables a substantially larger market access to treatment, which according to our model resulted in significantly better health outcomes for the intended-use population.

PCV139

EPIDEMIOLOGY AND ECONOMIC BURDEN OF ATRIAL FIBRILATION TO THE PUBLIC HEALTH CARE SYSTEM IN BRAZIL

Nascíben V[1], Piegas LSP[2], Figueiredo MJDO[3], Martins SCO[4]
[1]*Boehringer Ingelheim Brazil, Sao Paulo, SP, Brazil,* [2]*Dante Pazzanese Institute, Sao Paulo, SP, Brazil,* [3]*UNICAMP, Campinas, SP, Brazil,* [4]*Hospital das Clínicas de Porto Alegre, Porto Alegre, RS, Brazil*

OBJECTIVES: To present Brazilian data on atrial fibrillation (AF) and perform a cost analysis of events related to this disease. **METHODS:** AF is an important risk factor for stroke and ischemic heart failure (HF) and death. It is estimated that in Brazil there are around 1.5 million patients with AF and that this population is correlated with the age pyramid. The prevalence of AF in the general population is estimated between 0.4% and 1%, increasing substantially with age. Among the strokes 20% are related to AF and 85% of these strokes are of ischemic origin and 15% of hemorrhagic origin. The stroke mortality in Brazil is 20.5 per 100,000. A panel of experts examined the resources related to the treatment of events related to AF. The panel was conducted through a questionnaire, where the experts listed all procedures, tests, drugs and materials used in every event. Unit costs for drugs and material were obtained from acquisition lists (BPS and SIMPRO magazine, respectively), hospitalization, exam and procedure costs were extracted from a public reimbursement database (SIGTAP). **RESULTS:** From the expert panel performed, the cost of events were: fatal ischemic stroke (IS) 11,810BRL (7,398USD), non-fatal IS without disability 2,812BRL (1,761USD), non-fatal IS with moderate disability 4,470BRL