patient's 30-day BP profile was simulated and an individual correction factor estimated. Each patient's correction factor was calculated by dividing the mean of their simulated BP reduction by the BP reduction achieved with no dosing errors. For each treatment, the overall correction factor was derived by averaging the individual correction factors. **RESULTS:** The much slower rise in BP after stopping aliskiren, and the high prevalence of missed doses, led to substantially different correction factors. **CONCLUSIONS:** These findings suggest that once-daily drugs differ in the extent to which they lower BP in real life, in which missed doses happen frequently. When differences in correction factors are applied to drugs with similar efficacy, they can reveal meaningful (1–3 mmHg systolic BP) differences in real life effectiveness.

PCV11

EFFECTIVENESS OF DRUG-ELUTING STENTS VS. BARE METAL STENTS UNRESTRICTED USE IN PATIENTS WITH CORONARY HEART DISEASE IN SOCIAL SECURITY MEXICAN INSTITUTE

González-Díaz B[1], Contreras-Hernandez I[1], Castaño-Guerra R[2], Farell-Campa J[2], Arguero-Sànchez R[2], Morales-Cisneros G[1], Estrada-Gallegos J[1], Garduño-Espinosa J[1]
[1]Social Security Mexican Institute, Mexico City, Mexico, [2]Hospital de Cardiologia Centro Medico Nacional Siglo XXI, Mexico City, Mexico

OBJECTIVES: The purpose of the present study was to investigate, the impact f drug-eluting stents (DES) vs. bare metal stent (BMS) implantation on the incidence of major adverse cardiovascular events in patients with real conditions on the occurrence of short-and long term, of stent thrombosis, myocardial infarction, need for repeat revascularization and clinical symptoms and death. **METHODS:** Since March 1, 2006 to September 31, 2007 a total of 220 consecutive patients with novo lesions exclusively treated with DES unrestricted use vs. bare metal stents and 1 year a follow-up. In a cohort of patients with ischemic disease with indication of PCI (Percutaneous Coronary Intervention). The measure of effectiveness was compared in-hospital, 6-month, 1-year outcomes in 220 patients who underwent PCI using DES or BMS. Major adverse cardiac events (MACE) included: death cardiac, myocardial infarction (MI), restenosis angiographic (RA), stent thrombosis, target lesion revascularisation (TLR) was defined as a repeated revascularisation procedure (either PCI or coronary bypass surgery), as the result of restenosis in the stented segment. Definite stent thrombosis was included defined as an acute coronary ischemic event associated to angiographic documentation of occlusion stent. Statistical Analysis: continuous variables are presented as mean+SD and were compared by means of the Student unpaired t-test. Categorical variables are presented as counts and percentages and compared by means of the Fisher exact test and Survival curve Kaplan Meier. **RESULTS:** Age BMS 60.01 +– 9.195 vs. DES 56 +– 9.86 value $p = 0.026$, diabetes, hypertension, hypercholesterolaemia, current smoking similar. Both groups were reasonably well matched for baseline characteristics with exception age. The Expulsion fraction FEVI BMS 49.64 +– 13% vs. DES 52.19 +– 11.7%, stents implanted BMS 55.1% vs. DES 42.9% with a medium 1.5 stents for patient. Total MACE (Major adverse cardiac events): 10 (11.4%) vs. 31(24.2%) $p = 0.018$, restenosis and need revascularization lesion target (TLR) BMS 13 (10.2%) vs. DES 2 (1.6%) $p = 0.002$, thrombosis 6 (4.7%) vs. 0 $p = 0.039$, angina 2(1.6%) vs. 6 (6.8%) $p = 0.044$, death 10 (7.8%) vs. 0 $p = 0.007$, test positive for ischemic 3 (2.3%) vs. 1(1.1%) $p = 518$, required new revascularization BMS 3 (2.3%) vs. DES 3(3.4%) $p = 0.64$. The baseline and procedural characteristics reflect the complex patient's. The survival free events were BMS 74% vs. DES 88 %, the difference in major adverse cardiac events was driven by the reduction in the need for repeat revascularization, defined as TVR in the DES group. **CONCLUSIONS:** The lower differential effect in real-world outcomes, together with increased material use compared with the difference in major adverse cardiac events was driven by the reduction in the need for repeat revascularization, defined as TLR in the DES group.

PCV12

AN ANALYSIS OF THE ANTIHYPERTENSIVE EFFECTIVENESS OF ARBS VS. ACE INHIBITORS

Sharplin P[1], Televantou F[2], Beckham C[3], Chamberlain G[1]
[1]CRC, Cardiff, UK, [2]Sanofi-Aventis, Guildford, UK, [3]Bristol-Myers Squibb, Uxbridge, UK

OBJECTIVES: To explore the efficacy of Angiotensin Receptor Blockers (ARBs) in reducing blood pressure (BP) compared to ACE Inhibitors in a real-world setting. **METHODS:** We analysed the records of 16,866 (14,651 ACE Inhibitors and 2,215 ARBs) adult patients with hypertension who were initiated on the agents between 1998 and 2006 and who remained on that hypertensive treatment as monotherapy for the duration of their time in the database. Anonymised patient data were drawn from the UK THIN general practice database. Hypertension was defined as a systolic blood pressure (SBP) reading ≥140 mmHg or diastolic BP (DBP) ≥90 mmHg. **RESULTS:** In a population means analysis, at 1 year, mean SBP reductions for patients receiving ARB therapy reached 13.2 mmHg compared to 11.1 mmHg for patients receiving ACE Inhibitors. For DBP mean reductions for patients receiving an ARB reached 7.8 mmHg compared to 6.7 mmHg for patients receiving an ACE Inhibitor. At 2 years, patients' mean SBP reductions reached 13.6 mmHg for the ARBs group and 11.2 mmHg for the ACE Inhibitors group. Similar results were also observed with DBP at 2 years with patients receiving ARB treatment reaching reductions of 8.3 mmHg compared to 7.1 mmHg reached by patients receiving an ACE Inhibitor. The comparisons were statistically significant ($p < 0.001$) in a linear mixed multivariate analysis adjusting for repeated measures and random practice effects conditioning on baseline blood pressure, age, diabetes status, hypertensive diagnosis status and number of other non-hypertensive cardiovascular treatments. **CONCLUSIONS:** In a real-world setting, patients receiving ARBs as monotherapy are observed to achieve greater reductions in blood pressure compared to those receiving ACE Inhibitors as monotherapy.

PCV13

ATTAINMENT OF MULTIPLE RECOMMENDED LIPID LEVELS FOLLOWING LIPID MODIFYING TREATMENT IN HIGH RISK PATIENTS. PRIMULA STUDY, SPAIN

Suarez C[1], Maiques A[2], Ambegaonkar B[3], Melero M[4], Nocea G[5], Zhang Q[3], Sazonov V[3]
[1]H. de La Princesa, Madrid, Spain, [2]Centro de Salud de Manises, Valencia, Spain, [3]Merck & Co., Inc, Whitehouse Station, NJ, USA, [4]Merck Sharp & Dohme, Madrid, Spain, [5]MSD Spain, Madrid, Spain

OBJECTIVES: Among patients at high risk for coronary heart disease (CHD) LDL-C remains the primary lipid treatment target. However, HDL-C and triglycerides (TG) have also emerged as modifiable risk factors (RF). This study assessed the attainment of multiple recommended lipid levels among patients receiving lipid modifying therapy (LMT). **METHODS:** A retrospective clinical chart review of patients treated in primary care and hospitals was conducted in Spain. High CHD risk patients (identified as patients with CHD/CHD equivalent, or 2+ CHD RF) who had full lipid panels 12 months pre-LMT (baseline), and

12–36 months post-LMT initiation (follow-up), were included. Target levels for LDL-C were defined as per NCEP ATP III guidelines. Recommended levels for HDL-C were >40 mg/dL for men and >50 mg/dL for women, and <150 mg/dL for TG. **RESULTS:** We identified 556 high CHD risk patients, mean age 63.6 (SD10.6) years and 55.9% patients were male. Ninety-five percent had initiated statin mono or combination therapy. Baseline mean values for LDL-C and HDL-C were 159.5 mg/dL (SD38.4) and 52.3 mg/dL (SD16.4), respectively. The median TG level was 140 mg/dL (IQR: 104–198 mg/dL). The reductions in mean LDL-C, HDL-C and TG from baseline were 26.4%, 0.1% and 8%, respectively. At follow-up, of the total patients with LDL-C not at goal (48.9%), 47.1% had only LDL-C not at goal, 52.9% had both LDL-C not at goal and HDL-C and/or TG not at goal, and 19.4% had all three lipid components not at goal. **CONCLUSIONS:** In this cohort of mostly statin-treated high risk patients, barely half of them had achieved LDL-C target levels 12–36 months after LMT initiation. Among those with LDL-C not at goal, about 53% of patients experienced HDL-C and/or TG also not at goal indicating high prevalence of multiple lipid disorders.

PCV14

CENTRALISED PAN-EUROPEAN SURVEY ON THE UNDER-TREATMENT OF HYPERCHOLESTEROLEMIA IN PATIENTS USING LIPID LOWERING DRUGS (CEPHEUS-GREECE)

Elisaf M[1], Daskos G[2], Nikas N[2]
[1]University Hospital of Ioannina, Ioannina, Greece, [2]AstraZeneca SA, Athens, Greece

OBJECTIVES: Surveys evaluating plasma lipid goal attainment in coronary heart disease (CHD) patients have shown that hypercholesterolemia is inadequately treated. The aim of this survey was to evaluate the use and efficacy of lipid lowering drugs (LLD) and to identify factors associated with failure to reach LDL-C target. **METHODS:** CEPHEUS-Greece was part of a European multi-centre, cross-sectional survey performed during a single visit in 8 countries and included patients on LLD for ≥3 months without a dose change for at least 6 weeks. Fasting lipid samples were analysed in a central laboratory. Physicians and patients completed a questionnaire, covering various aspects of hypercholesterolemia. **RESULTS:** 175 Greek physicians (48.6% in primary care, 47.4% cardiologists, 4.0% other) recruited consecutive patients in 2006–2007. The full analysis set population comprised 1321 patients. Mean (±SD) age was 61.7 (11.3) years (44.8% females) and waist circumference 96.2 (14.4) cm. 28% were smokers, while 60.7%, 35.4% and 25.1% of patients had a history of hypertension, CHD or diabetes, respectively. 83.6% of patients were on statin monotherapy. 53.9% remained on their starting dose of LLD with no adjustment. Overall, 49.7% and 49.3% of patients reached the Third Joint European Task Force and the 2004-updated NCEP ATP III LDL-C goal, respectively. Only 14.7% of the very high-risk population reached the 2004-updated NCEP ATP III target (LDL-C < 70 mg/dl or 1.8 mmol/l). Multivariate analyses showed that smoking status (non-smokers vs smokers, OR: 2.17 [95% CI: 1.59–2.95]) and history of CHD (no history vs history, OR: 4.89 [95% CI: 3.57–6.69]) were strong determinants for reaching LDL-C target. **CONCLUSIONS:** Almost 50% of Greek patients using LLD are not on target for LDL-C. In addition to lifestyle interventions, selection of an appropriate treatment strategy, adherence to guidelines and improvement of patient compliance may have a significant impact on reaching LDL-C target.

PCV15

CORONS STUDY: EXAMPLE OF STATINS IMPACT ON ALL CAUSE MORTALITY IN THE ELDERLY

Kieffer A[1], Turbelin C[1], Rabeharimanana F[1], Flahault A[2]
[1]INSERM, Paris, France, [2]EHESP, Paris, France

OBJECTIVES: To assess the relationship between statin therapy on mortality risk in usual care management of elderly. **METHODS:** The present study is a population-based, observational, longitudinal study performed on 59,398 subjects aged 70 years or older, between 2000 and 2005 in Northern France (266,071 person-years). The data was extracted from a French administrative managed care database (CANSSM). Survival of incident persistent statin users was compared to survival of non lipid-lowering agent (LLA) users, thanks to multivariable Cox proportional models stratified on five-year birth cohorts adjusted on gender and hospitalizations occurring in 1999. In the same way, impact of fibrate therapy was explored. Survival of anti-glaucoma treatment (AG) users versus non AG users was also assessed as a neutral comparator model. **RESULTS:** As of January 1, 2000, 59,398 subjects over 70 years of age were included in the cohort.. The median age at baseline was 76 years of age [min: 70 / max: 107]. Overall survival at the end of follow-up was 79.3% for persistent statin users versus 61.0% for non LLA users. In the global multivariate Cox model, stratified on five-year birth cohorts and adjusted on gender and hospitalizations occurring in 1999, the HR for mortality associated with persistence of statins was 0.71 (95% CI 0.63–0.81; p < 0.0001). No statistic association was found for the survival of subjects persistent to fibrate versus non LLA users, nor for persistent AG users versus non AG users, with respectively HR = 1.05 (95% CI 0.75–1.48, adjusted; p = 0.77) and HR = 0.81 (95% CI 0.63–1.05, adjusted; p = 0.12). **CONCLUSIONS:** Although further investigation must be conducted, in particular on adjustment variables, the main results of our study suggest a beneficial impact of persistent statin therapy in reducing all cause mortality by 29%, in a large cohort of elderly.

PCV16

MONITORING POTENTIAL DRUG-DRUG INTERACTIONS—AN APPLICATION FOR PRESCRIPTION CLAIMS DATABASES

Foley K[1], Chang S[2], Misra A[2], Hansen LG[3]
[1]Thomson Reuters, Philadelphia, PA, USA, [2]Thomson Reuters, Washington, DC, USA, [3]Thomson Reuters, Northwood, NH, USA

OBJECTIVES: To understand the potential for drug-drug interactions (DDIs) among patients with diabetes and/or hypertension and multiple other comorbidities. **METHODS:** Patients were selected from the 2005 MarketScan databases who had hypertension and/or diabetes, a chronic disease score in the top 10% of the cohort, and 12 months of continuous enrollment. Concomitant medications were identified from the 12 month follow-up and tested against the DRUG-REAX system, which is used by pharmacists to check for potential DDIs and determine their clinical significance. The system includes a severity rating and documentation quality classification for the interaction potential. A DDI was counted when drugs in potentially interacting combinations with excellent or good documentation were dispensed within 30 days of each other during the time period. **RESULTS:** A total of 98,844 patients met the study criteria with 79,830 (80.7%) of them having at least one potential DDI. These patients filled an average of 28 prescriptions per year and almost 98% were over age 64. Among these patients, 306,649 unique, potential DDIs were identified with the severity rating distributed as follows: Contraindicated—0.8%; Major—29.9%; Moderate—61.1%; Minor 8.3%. Potential DDIs included: potassium chloride in combination with anticholinergics (contraindicated), potassium