(n = 39,530), three comparing Simvastatin (n = 20,859) and three comparing Atorvastatin (n = 15,553) versus control were retrieved. No head-to-head comparisons between these statins in the pre-defined doses were found. All statins were significantly superior to control in the evaluated outcomes, and the highest risk reductions observed were for non-fatal myocardial infarction (MI): Atorvastatin relative risk (RR) = 0.57 (95% CI: 0.44–0.74, I^2 = 0%), Pravastatin RR = 0.79 (95% CI: 0.73–0.86, I^2 = 12%), Simvastatin RR = 0.62 (95% CI: 0.54–0.70, I^2 = 0%). Indirect comparisons showed no statistically significant difference between statins in the prevention of total death, CV death and stroke. When compared to Pravastatin, the RR of MI for Simvastatin was 0.78 (95% CI: 0.67–0.91) and for Atorvastatin was 0.71 (95% CI: 0.54–0.94); the comparison between Atorvastatin versus Simvastatin showed no difference (RR = 0.92, 95% CI: 0.68–1.29). **CONCLUSIONS:** Our results showed similar efficacy among these statins in major events reduction in the doses evaluated. Pravastatin seems to be less effective than the others in the prevention of MIs. Considering the similar results of these drugs, market price must be used in the selection of the most appropriate therapy.

PCV14

A COMPARISON OF BLOOD PRESSURE OUTCOMES ASSOCIATED WITH THE USE OF ANGIOTENSIN-RECEPTOR BLOCKERS (ARBS) IN PATIENTS SEEN PREDOMINANTLY IN PRIMARY CARE PRACTICES

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OBJECTIVES: This study compared blood pressure (BP) outcomes (changes in BP and goal attainment) in adult patients (age >18 years) treated with an ARB or ARB-HCTZ fixed dose combination. **METHODS:** A retrospective study was conducted using the GE Centricity EMR database, which contains the ambulatory health records for more than 11 million US patients. Patients with a physician order for one of the following ARBs or fixed-dose combination (FDC) with HCTZ (candesartan, irbesartan, losartan, olmesartan or valsartan) prior to December 2007 were included in the study. Demographics, clinical characteristics (co-morbidities, previous antihypertensive medications) and BP readings at baseline and throughout the 13-month follow-up period were recorded. The mean change in systolic and diastolic BPs and percent patients attaining BP goal (two consecutive BP readings <140/90 or 130/80 in patients with diabetes or renal disease) were recorded. **RESULTS:** A total of 81,706 patients (60.5% female, mean age 61.6 years) receiving an ARB or ARB-HCTZ FDC were identified. Patients with prior antihypertensive medication usage [57,501 (70.4%)] had higher baseline BP readings [mean SBP (SD): 147.4 (29.35) vs. 138.7 (18.93) mmHg; mean DBP (SD): 84.2 (17.93) vs. 80.8 (12.35)] and also experienced greater reductions in BP [mean SBP change (SD): 21.1 (29.61) vs. 13.2 (17.31) mmHg]. At baseline, a greater proportion of patients with prior antihypertensive medication usage (57.8% vs. 49.5) were not at BP goal. BP goal attainment was similar between the two groups (60.6% vs. 62.6%, prior vs. absence, respectively). Mean time to goal (82.8 days vs. 78.5 days, prior vs. absence, respectively) was also similar between the two groups. **CONCLUSIONS:** Most patients initiating ARB /ARB-HCTZ therapy have utilized other antihypertensive medications in the 13 months prior to starting ARBs. Prior antihypertensive medication users experienced greater reductions in BP. BP goal attainment was similar between patients with and without prior antihypertensive medications.

PCV15

COMBINED OPTIMAL LIPID VALUE GOAL ATTAINMENT AFTER TREATMENT INITIATION WITH SIMVASTATIN PLUS NIACIN EXTENDED-RELEASE COMBINATION THERAPY VERSUS EZETIMIBE PLUS SIMVASTATIN COMBINATION THERAPY IN A MANAGED CARE PATIENT POPULATION WITH PRIOR CARDIOVASCULAR DISEASE IN THE UNITED STATES

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OBJECTIVES: Compare combined optimal lipid value (OLV) goal attainment [low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C), and triglycerides (TG)] between patients initiating niacin extended-release [NER] + simvastatin (NER/S) and ezetimibe + simvastatin (E/S) combination therapies among patients in a managed care setting. **METHODS:** An observational cohort study of patients aged = 18 initiating NER/S (addition of NER to existing simvastatin therapy) or E/S therapy between January 1, 2001 and June 30, 2006 (index date) was performed using the HealthCore Integrated Research Database. Patients with a minimum 24 months of follow-up and diagnosis of cardiovascular disease during the 12 months prior to index date were included. A propensity score regression model for treatment selection was created after adjusting for age, gender, baseline LDL-C, HDL-C, and TG, and Deyo-Charlson comorbidity index (DCI) score. The propensity score was included in a multivariate logistic regression model to estimate combined OLV goal attainment (per treatment guidelines) between the groups. **RESULTS:** A total of 883 patients were identified initiating NER/S (n = 445) or E/S (n = 438). E/S patients were younger (51.4 ± 8.4 years vs. 54.0 ± 8.5 years; p < 0.001) and less likely to be male (55.3% vs. 81.1%; p < 0.001). Fewer E/S patients were likely to have prior hypertension (67.1% vs. 80.2%; p < 0.001) and congestive heart disease (17.1% vs. 45.6%; p < 0.001) versus NER/S patients, though the pre-index DCI score was statistically non-significant between the groups (0.7 ± 1.1: E/S vs. 0.8 ± 1.1: NER/S; p = 0.097). Logistic regression showed that NER/S patients were 64% more likely to achieve combined OLV goal attainment as compared to E/S treated patients [Odds Ratio: 1.64 (95% CI: 1.02—2.62); p = 0.04]. **CONCLUSIONS:** NER/S treatment was associated with a likelihood of combined OLV goal attainment versus E/S patients. Further research on impact of early initiation of NER/S therapy emphasizing multiple lipid parameter management versus LDL-C-only focused treatment strategies comes is warranted.

PCV16

COMPARATIVE EFFICACY OF LOSARTAN AND IRBESARTAN IN HYPERTENSIVE PATIENTS AT SARABURI HOSPITAL, THAILAND 2007

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OBJECTIVES: 1) To compare antihypertensive efficacy of Losartan and Irbesartan controlling for baseline Seated Diastolic and Systolic Blood Pressure (SeDBP&SeSBP) before treatments, and 2) to compare antihypertensive efficacy of Losartan and Irbesartan between gender controlling for 1) baseline SeDBP&SeSBP, and 2) age. **METHODS:** An experimental design was performed. All hypertensive patients who were prescribed 50 mg. Losartan once a day or 150 mg. Irbesartan once a day for hypertension during January 1-June 30, 2008 were the population framework. Exclusion criteria included concomitant diseases that would present safety hazards and concomitant medications that might interfere with the assessment of efficacy or safety e.g., drugs known to affect BP. Simple random technique was employed. The α 0.05, power 0.90 and effect size 0.07 were set to generate 200 samples in each group (total 400). The average baseline SeDBP&SeSBP of Losartan group and Irbesartan group were 91.86 ± 13.73, 150.76 ± 19.14 and 89.56 ± 10.69, 148.42 ± 15.45 respectively. Baseline SeDBP&SeSBP were used as covariates. After medications for eight weeks SeDBP&SeSBP were measured and compared. **RESULTS:** Total 400 (100%) patients, mostly 267 (66.80%) were female, 133 (33.33%) were male with average age 63.31 ± 12.52 years. After treatment the average SeDBP of Losartan or Irbesartan groups were 77.26 ± 9.76 and 74.43 ± 9.84 mm. Hg respectively (p = .000, ANCOVA). After treatment the average SeSBP of Losartan or Irbesartan groups were 131.72 ± 15.17 and 127.50 ± 12.22 mm. Hg respectively (p = .010, ANCOVA). When controlled age (covariate) and added gender (fixed factor) to the model, the means of SeDBP&SeSBP of Losartan group and Irbesartan group were 77.26 ± 9.76, 128.81 ± 12.89 and 72.43 ± 9.84, 127.50 ± 12.22 mm. Hg respectively (p = 0.000 and 0.029, two way ANCOVA without gender interaction (p = 0.520, 0.101). **CONCLUSIONS:** Irbesartan 150 mg. once a day could significantly lower seated systolic and diastolic blood pressure in hypertension patients better than Losartan 50 mg. once a day. Gender made no differences on efficacy of the two drugs.

PCV17

HOW DOES THE DUAL COMBINATION OF ARBS+HCTZ COMPARE TO OTHER DUAL COMBINATIONS IN THE TREATMENT OF HYPERTENSION?

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OBJECTIVES: To compare the effectiveness of dual combinations of angiotensin II receptor blockers (ARBs) and ACE Inhibitors (ACEIs) with hydrochlorothiazide (HCTZ) or Calcium Channel Blockers (CCBs) in reaching target blood pressure (BP) in a real-world setting. **METHODS:** Records from a longitudinal population-based database of more than 170,000 patients in over 53 family practice clinics in southwestern Ontario, Canada were analyzed. These records contained chart-abstracted information such as visit diagnosis, BP, medications and consultation notes. The records from adult non-diabetic patients who were diagnosed with hypertension and were initiated on the combination therapy in 2005 and continued on the combination for at least 9 months were included. Hypertension was defined as a BP exceeding 140/90 mmHg, chart entry of a diagnosis of hypertension, or use of anti-hypertensive medication. The proportions of patients reaching target BP (BP less than 140/90 mmHg) were recorded and the combination of ARBs+HCTZ was compared to other combinations. Due to the well known comparable safety profile of the compounds, a safety analysis was not performed. **RESULTS:** A total of 4,458 patients were treated with dual combinations of ARBs and ACEIs with HCTZ or CCBs. The proportions of patients reaching target BP were 35% on ARBs + HCTZ compared to 30% on ACEIs+HCTZ (p = 0.006), 32% on ARBs+CCBs (p = 0.03), and 28% on ACEIs+CCBs (p = 0.001). **CONCLUSIONS:** In the real-world setting, a greater proportion of hypertensive patients treated with the dual combination ARB+HCTZ reached target BP than the dual combinations of ARB+CCB, ACEI+HCTZ, or ACE+CCB. Patients treated with the combination of an ARB with HCTZ or CCB achieved target BP in a greater proportion than patients treated with ACEI-based counterparts.

PCV18

COST OF ACHIEVING LDL REDUCTION AMONG PATIENTS TREATED WITH EZETIMIBE CO-ADMINISTRATION COMPARED TO STATIN MONOTHERAPY IN THE UK

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BACKGROUND: The randomized double-blind parallel group trial, INPRACTICE, demonstrated a significant benefit of ezetimibe co-administration with simvastain 10/40 mg in patients achieving LDL-C targets of <2 mmol/L, compared to atorvastatin