51-70 showed a difference for attitude towards EBM (24.9815±2.27, p=0.006); skills (12.57±6.41, p<0.001); and clinical guidelines (23.70±1.06, p<0.001). With regards to the usage of EBM, 81.5% of physicians reported lack of skills; 88.9% reported absence of support from hospital management; and 68.9% reported practical difficulties on applying CPG. **CONCLUSIONS:** GPs in Cyprus appear positive towards CPG and EBM, nevertheless current study identified several factors impeding their further penetration. Primarly support from the Ministry is imperative, along with educational activities to elucidate the scope and the context of CPG and EBM.

DISEASE- SPECIFIC STUDIES

CARDIOVASCULAR DISORDERS – Clinical Outcomes Studies

PCV1

EARLY HTA IN PHARMACOGENOMICS: A CASE EXAMPLE IN CARDIOVASCULAR DRUGS

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OBJECTIVES: ACE inhibitors (ACEi) are commonly used cardiovascular drugs. These drugs can cause the severe and possibly lethal adverse drug reaction (ADR) angioedema in a very small part (0.2%) of the patients. A pharmacogenomic test could be used to identify patients at risk for this severe ADR and advise them to use another drug. The goal of this study is to assess the test characteristics (cost, sensitivity and specificity) in order for it to be a cost effective test for preventing ACEi-induced angioedema. Furthermore, we assessed the influence of only testing part of the population carrying risk factors for angioedema. **METHODS:** A decision tree was used as angioedema usually occurs within the first year after starting an ACEi and data on long term risk is scarce. Test characteristics were assessed using Monte Carlo simulation. **RESULTS:** With a willingness-to-pay (WTP) threshold of €20,000 and €80,000 per QALY, a 100% sensitive and specific test may have a maximum cost of €1.29 and €1.92, respectively. A decrease in specificity has a 10-fold higher impact on the ICER than sensitivity as additional drug costs of false positives rapidly overcome the benefit of preventing angioedema. In order to warrant a €1.00 test price, specificity needs to be >95% whilst sensitivity may drop to 70% provided that specificity remains >98%. African people have a 3.88 times higher risk of developing angioedema than Caucasian people. When only genotyping this population, the maximum test price (100% sensitive and specific) would be €3.21 and €5.67 at a WTP threshold of €20,000 and €80,000, respectively. **CONCLUSIONS:** A theoretical pharmacogenomic test for ACEi-induced angioedema is only cost-effective at very high specificity, decent sensitivity and a low price. If only used in patients with a high risk on angioedema, the maximum test price could increase to a somewhat more realistic 5 Euro figure.

PCV2

CARDIOVASCULAR EVENT RATES IN PATIENTS WITH HIGH CARDIOVASCULAR RISK IN THE UNITED KINGDOM

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OBJECTIVES: To estimate real-world cardiovascular (CV) event rates in patients with high CV risk in the United Kingdom, for use in economic evaluations. **METHODS:** Patients in the Clinical Practice Research Datalink were identified as of January 1st, 2005 (index date) and followed until December 31st, 2011. Inclusion criteria were ≥2 years of data prior to the index date, age ≥40 years, LDL cholesterol ≥1.8 mmol/L, ≥1 medium or high-intensity statin prescription within the previous year, and a history of one of the following: peripheral arterial disease (PAD), myocardial infarction (MI), or ischemic stroke (IS). Patients also had to have ≥1 major CV risk factor (diabetes, age ≥65 and ≤85, MI or IS within 6 months, PAD, or smoking) or ≥2 minor ones (non-MI revascularization, coronary artery disease, low HDL, or elevated LDL cholesterol). Patients with MI or IS within 30 days of the index date, a history of hemorrhagic stroke, or systolic or diastolic blood pressures >180 or 110 mmHg were excluded. CV events were determined using procedure codes or primary diagnoses in hospital data. Composite rates included acute coronary syndrome (ACS) which includes MI or unstable angina, IS, heart failure (HF), transient ischemic attack, revascularization, or CV death. Patients were followed until the first of the following: CV event, death, or end of follow up. **RESULTS:** There were 7996 patients with a mean follow-up of 4.7 years, age of 71 years and LDL cholesterol of 2.75 mmol/L. The composite CV event rates per 1,000 person-years were 102 (overall cohort), 107 (baseline PAD, n=3345), 107 (baseline ACS, n=3114), 96 (baseline IS, n=430), and 197 (baseline HF, n=954). **CONCLUSIONS:** Despite high or medium-intensity statin use, patients in clinical practice experience potentially preventable CV events, particularly those with HF. These patients may benefit from interventions that reduce their CV event risk.

PCV3

ROSUVASTATIN: SWITCHING TREATMENT AND CLINICAL IMPLICATIONS IN PRIMARY CARE

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OBJECTIVES: to assess the impact of switching from Rosuvastatin to any other lipid lowering therapy on clinical outcomes in primary care. **METHODS:** a retrospective analysis based on data extracted from IMS Health Longitudinal Patient Database (IMS Health LPD). All new patients being treated with rosuvastatin (10-20 mg) between 1st January 2011 and 31th December 2013 were included in the analysis and the date of the first prescription was defined as the Index Date (ID). Exclusion criteria were the occurrence of an acute myocardial infarction (AMI) during the six months before the ID and the presence of at least one prescription of another statine in addition to rosuvastatin at the ID. Starting from the ID, patients were followed up until September 2015 or until one of the following event occurred first: statin treatment discontinuation, occurrence of an AMI or death. **RESULTS:** The final cohort was composed of 10,368 new patients being treated with rosuvastatin from 2011 to 2013. During the period of observation, 2,452 (23,6%) patients switched from rosuvastatin to another lipid lowering treatment, particularly to atorvastatin (56%) and simvastatin (25%). Factors associated with a higher probability of switch were female gender (HR=1.10, 95% CI:1.02-1.19, p=0.04) and the presence of Chronic Kidney Disease (HR=1.47, 95% CI:1.16-1.86, p=0.05). AMI occurred in 87 patients treated with rosuvastatin (incidence of 6.7 AMI/1000 PY), and in 26 patients switched to another lipid lowering treatment (incidence of 8.3 AMI/1000 PY). Cox proportional hazards model, including switching as a time-dependent covariate, showed that changing from rosuvastatin to another lipid lowering therapy was an independent predictor of AMI (HR 2.2, 95% CI 1.4–3.5, p=0.001). **CONCLUSIONS:** Switching from rosuvastatin to another lipid lowering treatment may impart an increased risk of experiencing an AMI and should be avoided unless strictly necessary on clinical grounds.

PCV4

HIGH RISK OF DEPRESSION IN PATIENTS WITH HEART FAILURE IN GERMANY

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OBJECTIVES: The goal of this study was to estimate the prevalence of and risk factors for diagnosed depression in heart failure (HF) and patients in German primary care practices. **METHODS:** This study was a retrospective database analysis in Germany utilizing the Disease Analyzer® Database (IMS Health, Germany). The study population included 132,994 patients between 40 and 90 years of age from 1,072 primary care practices. The observation period was between 2004 and 2013. Follow-up lasted up to five years and ended in April 2015. A total of 66,497 HF patients were selected after applying exclusion criteria. The same number of 66,497 controls were chosen and were matched (1:1) to HF cases on the basis of age, sex, health insurance, depression diagnosis in the past and follow-up duration after index date. **RESULTS:** HF was a strong risk factor for diagnosed depression (p<0.0001). A total of 10.5% of HF patients and 6.3% of matched controls developed depression after one year of follow-up (p<0.001). Depression was documented in 28.9% of the HF group and 18.2% of the control group after the five-year follow-up (p<0.001). Cancer, dementia, osteoporosis, stroke and osteoarthritis were associated with a higher risk of developing depression. Male gender and private health insurance were associated with lower risk of depression. **CONCLUSIONS:** The risk of diagnosed depression is significantly increased in patients with HF compared to patients without HF in primary care practices in Germany.

PCV5

EVALUATION OF SULPHONYLUREA INDUCED CARDIOVASCULAR EVENTS IN DIABETIC PATIENTS IN COMPARISON WITH NON SULPHONYLUREA AT SOUTH INDIAN TEACHING HOSPITAL

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OBJECTIVES: To assess the Incidence, the pattern of occurrence, risk factors for Sulphonulurea (SU) induced cardiovascular events (CE) in comparison with non sulphonylureas in diabetic patients (DPs). **METHODS:** The prospective study was conducted at south indian Hospital with Institutional ethical approval. The DPs with SU use, admitted with or without CE like Myocardial Infarction (MI), Unstable Angina (UA), Congestive Heart Failure (CHF) were recruited. Patients were divided into 2 groups, DPs with cardiovascular events (cases) and diabetic patients without CE(control). Risk factors for CE like lipid profile, social habits, like smoking, alcoholism, hypertension, BMI were also recorded. MI was defined as per International Classification of disease, Clinical Modification (ICD-10-CM code 121). UA was defined according to ICD-10-CM code 120. The CHF was defined according to ICD-10-CM code 150. **RESULTS:** A total of 600 DPs were enrolled in the study. Out of which 300 patients were diabetic with CE (cases) and 300 were diabetic without CE (control). Majority of the population was on SU 54.5% and SU use were highest in cases 58.7% compared with control group 50.3%, Statistical Chi Square test showed P value < 0.05 (0.04) showing a statistically significant difference between case and control population. Out of 300 patients 42% were with UA, 53% were with acute MI and 5% were with CHF. Event rate of acute MI (0.53%) were observed highest followed by UA (0.42) and CHF (0.05) respectively. Among SU, glimepiride (47%) was the most commonly used sulphonylurea alone, metformin combination (34%) followed by glibenclamide 5%, gliclazide 3% and glipizide <1%. SU use has showen higher incidence of MI 29%, compared to UA 22% and CHF 3% in our study. **CONCLUSIONS:** Clinicians must be cautious with the use of long term sulphonylureas especially in diabetic patients with cardiovascular risks.

PCV6

EFFECT OF SPIRONOLACTONE ON THE RISK OF NEW ONSET OF DIABETES AMONG PATIENTS WITH HEART FAILURE: A POPULATION-BASED STUDY