

inadequate control of LDL-C levels, despite being adherent to treatment **METHODS:** An observational retrospective cohort analysis based on five Local Health Units administrative databases was conducted, for a total number of 1.2 Million beneficiaries involved. Patients with at least one LDL-C measurement between January 1, 2011 and December 31, 2012 were included. Patients were characterized back 12 months to assess appropriateness and adherence to statin treatment **RESULTS:** Among patients with LDL-C determination (1'218 patients), 578 (47%) and 640 (53%) displayed LDL-C under control and out of control, respectively. Among patients with uncontrolled LDL-C, 74 (12%) and 566 (88%) were not treated and treated with statins, respectively. Among patients with statins treatment, 188 (33%) and 378 (67%) were treated with low and high efficacy statins, respectively. Finally, among patients treated with high efficacy statins, 225 (60%) and 153 (40%) were non-adherent and adherent to high efficacy statin treatment, respectively. LDL-C uncontrolled high efficacy adherent patients showed different distances from their lipid target: 28% were less than 10% distant, 28.4% were 10-19% distant, 10.5% were 20-29% distant, 11.1% were 30-39% distant and 24.8% were more than 40% distant **CONCLUSIONS:** These results are topical, as new monoclonal antibodies - PCSK9 inhibitors - are being marketed to address the residual unmet need in cholesterol statin-management of dyslipidaemia for uncontrolled patients. By projecting future percentages to the Italian population, the number of LDL-C patients who are uncontrolled, despite being adherent to a high efficacy statin, would be around 17'825

#### PCV42 ASSESSING RETROSPECTIVE DATA ON THE MANAGEMENT OF ISCHEMIC STROKE

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**OBJECTIVES:** To identify the characteristics and assess the treatment of patients diagnosed with ischemic stroke. It was also performed to compare the management of ischaemic stroke between current practice with the recommended guideline. **METHODS:** Retrospective reviews of the medical records of patients who were diagnosed with ischemic stroke at the medical record's office in a teaching hospital from January 1, 2013 to December 31, 2013. Patients' medication for the treatment of stroke at discharge were reviewed and identified. **RESULTS:** A total of 198 patients were diagnosed with ischemic stroke. This was found to be higher in men 104 (52.5%). In this study of 198 patients, 108 (54.5%) patients were diagnosed with newly onset of stroke and 28 (14.1%) patients were diagnosed with recurrent stroke. The major co-morbidities identified were the combination of hypertension and diabetes mellitus and hypertension alone, which were seen in 45 (22.7%) patients and 39 (19.7%) patients respectively. Aspirin and statin were the most commonly prescribed agent, which were 170 (85.9%) and 182 (91.9%) respectively. **CONCLUSIONS:** Majority of our patients are male, Malay and in the age range of 50-59. These patients had underlying hypertension and diabetes upon their diagnosis of ischemic stroke. Aspirin and statin were mostly prescribed and widely used to treat ischaemic stroke. The current guidelines appear to have some influence on the current practice of the management of ischemic stroke.

#### PCV43 EPIDEMIOLOGICAL BURDEN AND MANAGEMENT OF HYPERCHOLESTEROLEMIA IN HIGH CARDIOVASCULAR RISK PATIENTS IN SPAIN: A COMPREHENSIVE PICTURE FROM A SYSTEMATIC REVIEW OF THE LITERATURE

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**OBJECTIVES:** Elevated serum cholesterol levels are a well-known cause of cardiovascular events. The objectives of this study were: to review the epidemiology of hypercholesterolemia in Spain; to detail the proportion of diagnosed patients undergoing pharmacological treatment (PhT); the degree of attained lipid control, and associated medical costs. **METHODS:** A systematic literature review was carried out using Medline (pubmed) and Spanish databases as Medes and Biblioteca Virtual de la Salud. Manuscripts containing information on heterozygous familial hypercholesterolemia (HeFH); hypercholesterolemia in primary prevention (PP) (diabetes mellitus or SCORE risk >5) or secondary prevention (SP), published between January 2010 and October 2014, were included. **RESULTS:** Of the 1,947 published references initially retrieved, a full text review was done on 264 manuscripts and 120 were finally included. Prevalence of hypercholesterolemia ranged from 50%-84% in diabetics, 30%-60% in patients with high cardiovascular risk, 64%-74% with chronic coronary heart disease, 33%-97% in acute coronary syndromes, 40%-70% in stroke patients, and 60%-80% in those with peripheral artery disease. Despite the finding that 30%-90% of patients were on pharmacological treatment, lipid control was found only in 15%-65% of cases in primary prevention and in 15%-56% of patients in secondary prevention. Among those with HeFH 95%-100% were treated but less than 16% achieved LDL-c target. **CONCLUSIONS:** An elevated prevalence of hypercholesterolemia can be seen in targeted groups at higher cardiovascular risk. Although most patients are receiving pharmacological treatment, rates of control continue to be low, both in primary and secondary prevention.

#### PCV44 BENEFIT-RISK OF VKA FOR ATRIAL FIBRILLATION BEFORE DOAC: A COHORT STUDY IN A CLAIMS AND HOSPITALIZATION DATABASE

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**OBJECTIVES:** To assess real-life outcomes in new Vitamin K antagonists (VKA) users for atrial fibrillation (AF), before introduction of direct oral anticoagulants (DOAC) for non-valvular AF (NVAF). **METHODS:** Cohort study of new VKA users between

2007-2011, with a 2-year history and a 3-year follow-up censored at the end of 2012, was designed in the EGB, a 1/97 random sample of the French national healthcare claims and hospitalization database. AF population was defined as patients with full coverage for AF, hospitalization or probabilistic AF information in the database, and without other probable cause of VKA prescription. NVAF population was defined as patients of the AF population without valvular disease history. Outcomes were the first hospitalization for bleeding, arterial thrombotic event (ATE), acute coronary syndrome (ACS), and death. Incidence rate of outcomes was estimated during VKA exposure. **RESULTS:** Among 8,894 patients identified, 3,345 were classified in the AF population (3,977 person-years (PY)). Half were male (52%) with a mean age of 75 years, 87% had a CHA2DS2-VASc score  $\geq 2$ , and 12% a HAS-BLED score > 3. The incidence rate of bleeding was 28 patients (95%CI [23-34]) for 1,000 PY exposed to VKA, including 6 [3-8] cerebral, 10 [7-13] digestive, and 14 [10-17] other bleeds. Incidence rates were 16 [12-20] for ACS, 15 [11-18] for ATE, and 38 [32-44] deaths for 1 000 PY exposed to VKA. Patient characteristics and incidence rates were very close for the 2 818 patients with NVAF population criteria (3,367 PY). For this last population, incidence rates were 28 [22-34] for bleeding, 16 [12-20] for ACS, 15 [11-19] for ATE, and 35 [29-41] deaths for 1 000 PY exposed to VKA. **CONCLUSIONS:** This study provides background reference for bleeding, ischemic events, and deaths before introduction of DOAC for NVAF with quite same frequency for AF and NVAF populations.

#### PCV45 IMPACT OF GENETIC FACTORS ON GASTROINTESTINAL BLEEDING IN A PROSPECTIVE COHORT OF NEW WARFARIN USERS

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**OBJECTIVES:** Genetic factors have a great impact on the therapeutic dose of warfarin, a commonly prescribed anticoagulant. We still don't consider them when prescribing warfarin, despite the high incidence of major and minor gastrointestinal (GI) bleeds. We evaluated the potential differential impact of warfarin-related GI bleeds risk factors according to the patient's genetic profile. **METHODS:** This study is based on a prospective cohort of new warfarin-users whose objectives were to assess the genetic, clinical and environmental risks associated with the effectiveness and safety of warfarin. Data was collected on 1069 patients who began the treatment between May 2010 and July 2013. Patients were followed-up each three months up to a year. The outcomes were minor and major GI bleeds. We used a multivariate Cox regression analysis. **RESULTS:** Mean age was 70.8, 61.8% of patients were men, 68.4% had a history of hypertension and 60.8% of dyslipidemia and 76.4% had atrial fibrillation as a primary indication for warfarin. Overall, 4.8% of patients reported  $\geq 1$  minor GI bleed and 1.6% reported  $\geq 1$  major GI bleed. Patients with  $\geq 1$  polymorphism on both the CYP2C9 and the VKORC1 were significantly more at risk of having a major GI bleed (HR 10.72; p=0.023). Patients with a history of MI or angina were at risk of having both minor and major GI bleeds (HR=1.73 and HR=2.63; p<0.05). The impact of MI and angina disappeared for patients with no SNP on the CYP2C9 gene but was higher for patients with  $\geq 1$  SNP (HR=2.44 and HR=5.26, p<0.05). **CONCLUSIONS:** Our results suggest an interaction between MI or angina history and the occurrence of major and minor GI bleeds, especially in patients with  $\geq 1$  polymorphism on the CYP2C9 gene. Further analysis including concomitant drug use would help clarify clinical guidelines for this population and underlie the potential benefit of genetic testings.

#### PCV47 HOSPITAL READMISSIONS AND MORTALITY PATTERNS IN A COHORT WITH HEART FAILURE: 1 YEAR FOLLOW-UP FROM THE BRAZILIAN PUBLIC HEALTHCARE SYSTEM DATABASE

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**OBJECTIVES:** Heart failure (HF) affects 1.6 million people in Brazil. About 30%-40% progress to death in a year. This study aims to report 1-year retrospective analyses of hospital readmissions and mortality patterns associated to HF or all-other causes (OC) in a Brazilian cohort of patients with HF. **METHODS:** Brazilian Hospital Information System (SIH/SUS) database was used to collect hospital readmissions and mortality data associated to HF or OC, according to ICD-10 codes (I50.0 and I50.9, and "others", respectively). Patients were followed during 1 year (January-December 2014, regardless the entry data). Eligible criteria included patients with one previous HF hospital admission. **RESULTS:** A cohort of 21,015 patients was considered eligible. No HF or OC hospital readmissions were observed for 13,050 (62%) and 5,241 (25%) patients, respectively. For HF, 1, 2, 3, 4, and 5 re-hospitalizations were observed for 6,053, 1,255, 395, 152, and 59 patients. One patient required ten re-hospitalizations and the same occurred for 12 and 15 hospital readmissions. Therefore, about 38%, 9%, 3% and 1% of all patients had 1, 2, 3 or 4 hospital readmissions at least. OC readmissions showed higher number of patients for each amount of hospitalizations (11,046, 2,965, 989, 415, and 184 for 1, 2, 3, 4, and 5, respectively). Seven patients required ten re-hospitalizations and 1 required 19. Compared to HF, OC showed approximately twice of all patients with 1 hospital readmission at least (75%). Mortality rate was 19.23%, 702 (3.34%) due to HF and 2,632 (12.52%) due to OC. **CONCLUSIONS:** The number of patients requiring hospital readmissions for HF remain significant, despite available treatment options in Brazilian Public Healthcare System. OC results showed higher numbers, however, for this analysis all-other hospitalizations causes were included (except HF) indicating a high presence of comorbidities among this population and/or a misregistration at hospitalization time.

#### PCV48 HEART FAILURE IN A HEALTH AREA OF MADRID, SPAIN. DESCRIPTION AND MANAGEMENT FROM ELECTRONIC MEDICAL RECORDS

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