in the use of generic drugs.It is possible that even patients who have continually been prescribed generic drugs may switch to Protected Brand Drugs when they reimburse. The purpose of this study was to clarify this switch of patients to whom generic drugs had been prescribed to Brand Drugs using nationwide administrative data. **METHODS:** Using dispensation data of pharmacies on an annual basis from April 2011 to December 2014, we identified all prescriptions for DM, Hypertension and Hyperlipidemia. 1) We targeted patients prescribed only generic drugs between April and September each year, and who have dispensation records for three months or longer. 2) Where there was a change to the brand drug from a patient from Oct to March each year, this was defined as a drug switch. In terms of data analysis, we used SQL Server 2008 R2 for data handling and R for data analysis. **RESULTS:** From among the patients with diabetes (N=181,378), hypertension (343,188) and hyperlipidemia (343,188), those matching condition 1) in 2012 were patients with diabetes (n=44,533), hypertension (132,165) and hyperlipidemia (81,455). 31% of all patients were continually prescribed only generic. The switch from generic to Protected Brand Drugs was higher in the younger 40-50 age group (p=0.05) than in the elderly generation, and there was a higher rate of males (p=0.05). **CONCLUSIONS:** The results of this study showed that when promoting drug substitution to generic drugs as a policy for reducing medical costs, it is also necessary to consider measures to counteract the shift to brand drugs.

PCV165

PRESCRIPTION PATTERN OF ANTIHYPERTENSIVE AGENTS IN A TERTIARY CARE TEACHING HOSPITAL IN CENTRAL NEPAL

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OBJECTIVES: To study the pattern of prescription of antihypertensive agents among the patients visiting Cardiology department **METHODS:** This is a cross sectional study conducted in collaboration with Department of Cardiology, College of Medical Sciences and Teaching Hospital, Bharatpur, Chitwan during the period of three months (1st January to 31st March 2015). All the patients attending the outpatient department of Cardiology and prescribed antihypertensive drugs were taken as sample. **RESULTS:** Among the total 382 patients studied, the mean age was 58.53 ± 12.295 years. Males contributed to 219 (57.32%) and females 163 (42.67%) cases. Mean body mass index was 23.64 ± 5.29 Kg/m2. Two hundred forty (63.35%) patients were given combination therapy and 140 (36.64%) were treated with a single drug. Two drug combination was given in 147 (38.48%) cases, three drugs in 63 (16.49%), four in 20(5.23) and five drugs in 12 (3.14%) cases. Angiotensin receptor antagonists (42 or 30%), followed by calcium channel blockers (39 or 27.85%) were the most commonly prescribed drugs in 140 monotherapy cases. Combination of furosemide and spironolactone (101) was the most common single drug delivery system prescribed which was followed by metoprolol (88). **CONCLUSIONS:** The above findings would be useful for physicians and clinical pharmacologists in evaluating rational prescribing of the antihypertensive medicines. The inadequacy of control of blood pressure by monotherapy has increased the trend for combination therapy. The common antihypertensive used were angiotensin receptor antagonists.

PCV166

ADHERENCE WITH THERAPEUTIC GUIDELINES IN THE TREATMENT OF VENOUS THROMBOEMBOLISM AND PULMONARY EMBOLISM IN CLINICAL PRACTICE. FINDINGS FROM THE VICTOR STUDY

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OBJECTIVES: To assess adherence with therapeutic guidelines in the treatment of venous thromboembolism and pulmonary embolism in clinical practice. **METHODS:** An observational retrospective analysis on six Local Health Units' administrative and laboratory test databases was conducted, with around 2.7 Million beneficiaries involved. Patients discharged alive from a hospitalization with a diagnosis of venous thromboembolism and pulmonary embolism between January 1st, 2010 and December 31st, 2012 were included. Since the index date (date of discharge), patients were characterised and followed-up basing on previous and following 12 months, respectively. **RESULTS:** A total of 4,499 patients were included in the analysis. More prevalent therapeutic patterns and sequences occurred as follows. Among included patients, considering all the follow-up period, 33% had heparin only (average duration of heparin treatment equal to 143 days), 26% had vitamin K antagonist (VKA) only, 4% had fondaparinux only, and 12% had none of the previous treatments. Eight percent of included patients were initially prescribed for VKA and combined heparin during the follow-up period (average duration of heparin treatment equal to 76 days), 4% were initially prescribed for heparin (average duration of heparin treatment equal to 150 days) and combined VKA during the follow-up period. Four percent of included patients were initially prescribed for VKA and switched to heparin during the follow-up period (average duration of heparin treatment equal to 99 days) while 3% were initially prescribed for heparin (average duration of heparin treatment equal to 75 days) and switched to VKA during the follow-up period. **CONCLUSIONS:** Adherence with therapeutic guidelines in the treatment of venous thromboembolism and pulmonary embolism in clinical practice appeared unsatisfactory since a high percentage of patients are treated with heparins for time period longer than recommended instead of switching to VKAs.

PCV167

ANTICOAGULANT TREATMENT AFTER VTE IN THE NETHERLANDS

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OBJECTIVES: To describe initial anticoagulant treatment after venous thromboembolism (VTE) as recorded in electronic healthcare records and relate this to the underlying risk factors, guidelines and recurrence rates. **METHODS:** From the PHARMO GP Database, patients with deep venous thrombosis (DVT) or pulmonary embolism (PE) in 2007-2011 were identified for whom out-patient pharmacy dispensing data was available. Cancer, other risk factors and type and duration of anticoagulant treatment (LMWH and/or VKA) within 90 days of diagnosis and recurrence of VTE were assessed. **RESULTS:** The study cohort included 1,581 VTE patients: 1,053 with DVT and 528 with PE. For 70-86% of the VTE patients, dispensings of anticoagulant treatment were observed within 90 days. The median duration of anticoagulant dispensings among patients for whom both LMWH and VKA dispensings were observed was 3.5 months with provoked VTE and 3.7 months with unprovoked VTE. In these cohorts the observed median dispensing duration of (initial) LMWH treatment was 12 days. Recurrent VTE occurred mostly after discontinuation of anticoagulant treatment. Longer dispensing durations were observed among patients without recurrence. **CONCLUSIONS:** Treatment after VTE as captured in observational healthcare data generally follows the Dutch guidelines. However, many patients received LMWH dispensing covering periods longer than the recommended 5-10 days. Furthermore, among patients with a VTE recurrence shorter duration of anticoagulant treatment was observed compared to patients without a recurrence.

PCV168

PERSISTENCE TO VITAMIN-K ANTAGONISTS (VKA) AND NOVEL ORAL ANTICOAGULANTS (NOACS) IN NON-VALVULAR ATRIAL FIBRILLATION (NVAF): AN OBSERVATIONAL STUDY USING A COMPREHENSIVE REGIONAL DATABASE IN CATALONIA, SPAIN

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OBJECTIVES: Oral anticoagulation (OAC) is the mainstay of stroke prevention in NVAF. With the arrival of NOACs as an alternative to VKA, there is interest in the utilization of these classes. This study aimed to describe treatment patterns and estimate persistence to VKA and NOACs in NVAF patients. **METHODS:** Retrospective cohort study (Jan 2003-Dec 2013) of patients newly diagnosed with NVAF from the Badalona Serveis Assistencials database. Change in treatment line was defined as discontinuation (absence of prescription for ≥90 days) or switch. We calculated the cumulative incidence (95% CIs) of persistence after treatment initiation by treatment line, accounting for death as a competing risk. **RESULTS:** Overall, 2,137 patients initiated an OAC (VKA/NOAC) during the study period, with VKA most frequently prescribed [2,127 patients (99.5%) vs. 300 patients (14.0%) initiating NOAC]. VKA was the predominant 1st line OAC following NVAF diagnosis (2,127; 99.5%). For patients initiating 2nd line treatments (589), half (298; 50.6%) restarted VKA after previous VKA treatment and cessation; and half (290; 49.2%) switched from VKA to a NOAC. Almost all NOAC initiations were patients previously treated with VKA (291/300 patients; 97%). Persistence to VKA was lower in 1st line than 2nd line patients (median time to discontinuation/switch: 156 vs. 181 days). Persistence to NOACs was not calculated for 1st line patients due to low numbers; but for patients initiating NOAC as 2ndline, the median time to NOAC discontinuation/switch was 241 days. **CONCLUSIONS:** In this study, almost all patients initiating a 1st line OAC, initiated VKA, with essentially no first-line NOAC prescription. Unadjusted persistence was best for patients initiating a NOAC as a 2nd line, and the shortest among patients initiating VKA as 1st line. As more patients are treated with NOACs in Spain, future research on treatment patterns should allow adjustment of persistence comparisons between OACs.

PCV169

THE ECONOMIC BURDEN OF POOR ADHERENCE TO STATINS IN BELGIUM

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OBJECTIVES: Poor adherence to cardiovascular therapy is increasingly demonstrated to contribute to poor health outcomes, leading to increased hospitalization rates. This study aims to quantify the potential economic implications of non-adherence to statins in Belgium, from the payer perspective. **METHODS:** Adherence levels were estimated based on IMS Health Lifelink Treatment Dynamics database (IMS Health LTD). The number of prescription re-fills and total days covered by prescriptions were counted. Patients were assumed to take one pill per day. Dividing the total number of pills by the days of follow-up per patient resulted in the %-adherence level. The number of avoidable hospitalizations corresponding to each adherence level was determined by: the hospitalization risk difference between patients at 80-100% adherence and less than 80% adherence (grouped per 20%, Sokol et al 2005), and multiplying the number of patients in each of the five adherence levels in Belgium (extrapolated from IMS Health LTD according to Pharmanet 2013 report). The total avoidable cost attributable to non-adherence was estimated, by multiplying the number of avoided hospitalizations due to non-adherence with the average cost of a cardiovascular hospitalization in Belgium in 2014 (€5,865), adding the extra drug cost needed to obtain a 80-100% adherence. **RESULTS:** Sixty-five percent of anonymized patients in the IMS Health LTD were below the acceptable 80% adherence level. A total of 25,716 cardiovascular hospitalizations in Belgium were possibly attributable to lack of adherence to statins therapy. The estimated total avoidable costs related to hospitalization would be €150.8Mn. If all patients raised their levels of adherence to 80-100%, treatment costs with statins would increase with €68.5Mn. Thus, the estimated total amount of savings would be around €82.4Mn. **CONCLUSIONS:** Correcting poor adherence, not only in the cardiovascular area, can lead to important savings and give air to the healthcare payer to invest in innovative drugs.

PCV170

CLINICAL PATHWAY AND HEALTH CARE RESOURCES UTILIZATION OF A PATIENTS COHORT AT HIGH RISK OF CARDIOVASCULAR DISEASE OF LOCAL HEALTHCARE UNIT (ASLN°1) OF MILAN: A RESULTS OF INTERVENTION ON SECONDARY PREVENTION

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