cases. Mean BMI was 24.54 ± 5.73 Kg/m2. Forty eight patients were given combination therapy and 52 patients were treated with a single drug. A total of 61 (61%) cases presented with some forms of ADR whereas 39 responded with no any ADRs. But from Naranjo's Algorithm, only one case had definite ADR, 23 probable, 34 possible and four doubtful ADR. Presence of ADR was not associated with sex (p value 0.997, OR 1.002) ADR was also not significantly associated with the type of therapy; mono or combination therapy (p value 0.140) though combination therapy was associated with higher risk (OR= 1.916) Thirty three cases presented with cardiovascular complaints (21 cases of postural hypotension, three pedal edema and others), 18 with CNS complaints, six with respiratory complaints (dry cough), five with dermatological complaints like dermatitis and rashes, 11 with fatigue and four with gynaecomastia. Amlodipine, furosemide, spironolactone, enalapril, losartan were the common drugs causing ADRs. **CONCLUSIONS:** The above findings would be useful for physicians in rational prescribing of the antihypertensive medicines. Cardiovascular complaints were the most common presented ADRs and amlodipine the most common drug.

PCV3

A DESCRIPTIVE ANALYSIS OF PATIENT CHARACTERISTICS, BLEEDING AND RECURRENCE RISK AMONG U.S VETERAN PATIENTS DIAGNOSED WITH VENOUS THROMBOEMBOLISM

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OBJECTIVES: Patient characteristics and bleeding and recurrence risk of venous thromboembolism (VTE) were assessed among patients in the Veterans Health Administration (VHA) population. **METHODS:** Adult patients (≥18 years) with VTE (International Classification of Diseases, 9th Revision, Clinical Modification codes: 451-453, 671.3, 671.4 and 671.9 deep vein thrombosis [DVT]; 415.1, 673.2, 673.8 pulmonary embolism [PE]) were identified from the VHA Medical SAS datasets. The index date was defined as the first VTE diagnosis date between 01APR2006 and 30SEP2012. Patients were required to have ≥2 outpatient VTE diagnosis claims within 3 weeks and one inpatient stay with a VTE diagnosis, continuous health plan enrollment for 6 months pre-index date and no VTE diagnosis (V12.51, V12.52) in the baseline period. Patient data were assessed until the earlier of death or end of the study period. Outcomes of interest included VTE recurrence, major bleeding and clinically-relevant non-major bleeding (CRNM). The incidence rate (per 100 person-year) was calculated for VTE recurrence and bleeding outcomes. **RESULTS:** Total 88,280 VTE patients were identified, of which 67.6% had DVT and 24.9% had PE. VTE patients were mean age 66 years, 95.9% were male and more often resided in the Southern U.S. region (37%). The baseline Charlson comorbidity index score was 3.3 and common comorbid conditions included hypertension (56.00%), respiratory disease (34.3%) and heart disease (34.3%). Non-steroidal anti-inflammatory drugs (60.10%), antidepressants (33.00%) and anticoagulants (36.8%) were also frequently prescribed in the baseline period. During the follow-up period, 37.5% of VTE cases occurred in outpatient settings and 62.50% occurred in inpatient settings. The incidence rate for VTE recurrence (20.7%) was 10.5 per 100 person-years, major bleeding (21.9%) was 10.9 per 100 person-years and CRNM (23.00%) was 12.1 per 100 person-years. **CONCLUSIONS:** U.S. veteran patients diagnosed with VTE had frequent comorbid conditions and were at high-risk for bleeding and VTE recurrence.

PCV4

NOVEL PHARMACIST-GUIDED PHARMACOGENETIC SERVICE LOWERS WARFARIN-RELATED HOSPITALIZATIONS

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OBJECTIVES: Recent studies produced variable results regarding the impact of personalized warfarin dosing on clinical outcomes. Personalized warfarin dosing was implemented at the University of Illinois Hospital & Health Science System (UI-Health) with daily dose recommendations provided by a pharmacist-guided pharmacogenetic (PGx) consult service. Our aim was to compare warfarin-related hospitalizations post therapy initiation between inpatients managed by the PGx service and historical controls. **METHODS:** This was a prospective cohort study that compared warfarin-related hospitalizations, due to bleeding or thromboembolism over 30 and 90 days, in patients managed by the PGx service and historical controls. In generalized regression models with a Poisson error distribution assumption, we compared the incidence rates for the composite endpoint of bleeding or thrombosis related hospitalizations. Time to first re-admission due to warfarin-related complications was analyzed using log-rank tests and Cox-proportional hazard regression models. Analyses were adjusted for warfarin indication. **RESULTS:** There were totals of 6 and 15 warfarin-related hospitalizations in the PGx (n=389) and control (n=308) groups respectively 90 days post index hospitalization, with an estimated incidence rate ratio (IRR) of 0.45 (95% Confidence Interval [CI] 0.12 – 0.81). This benefit was still seen after risk adjustment (IRR 0.35, 95% CI 0.13 – 0.97). In time to event analyses, Kaplan-Meier estimators for the composite endpoint also showed lower events in the PGx group (p=0.04 at day 30 and 0.08 at day 90). In addition, the hazard ratio (HR) from a Cox-proportional model adjusted for the intervention also favored the Pgx group at 30 days (HR 0.189 [p=0.05]). **CONCLUSIONS:** A pharmacist-guided pharmacogenetic service lowers warfarin related hospitalizations a 3 months post therapy initiation.

PCV5

CLINICAL OUTCOMES AND TREATMENT PATTERNS OF VENOUS THROMBOEMBOLISM AMONG CANCER PATIENTS IN A LARGE COMMERCIAL DATABASE

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OBJECTIVES: Describe venous thromboembolism (VTE) treatment patterns and clinical outcomes among cancer patients. **METHODS:** Adult patients (age >18 years) with ≥2 VTE diagnosis claims (ICD-9-CM codes) in an outpatient setting or one VTE diagnosis in an inpatient setting were selected from the Humedica database (01JAN2008-31MAR2014). Continuous health plan enrollment 6 months pre-index date (VTE diagnosis) was required. Cancer patients (ICD-9 codes for cancer diagnosis, medication use, radiation therapy, or surgery) were differentiated from active cancer patients (ICD-9 codes for cancer diagnosis and treatment) based on diagnosis codes during baseline period. VTE treatment patterns with low molecular weight heparin (LMWH), unfractionated heparin (UFH), fondaparinux and oral anticoagulants (OACs) were evaluated. Incidence rate (in person-years) was calculated for clinical outcomes: VTE recurrence, bleeding, major bleeding and clinically relevant non-major bleeding. **RESULTS:** Patients with active cancer were on average sicker (Charlson Comorbidity Index score: 6.7 vs. 2.9) and had higher proportions of numerous comorbid conditions, including respiratory disease (52.7% vs. 40.4%), hepatic disease (14.9% vs. 6.1%) and baseline bleeding (30.4% vs. 17.8%) compared to all cancer patients. More than 70% of cancer patients were prescribed anticoagulants, and the majority received a combination of parenteral andoral anticoagulant treatment. A higher proportion of active cancer patients received only parenteral anticoagulant compared to all cancer patients (26.1% vs. 16.2%), and LMWH was the most commonly prescribed parenteral anticoagulant. The incidence rate of VTE recurrence (24.7 vs. 14.3 per 100 person-years) and major bleeding events (31.2 vs. 15.9 per 100 person-years) was higher among active cancer patients than all VTE cancer patients. **CONCLUSIONS:** Approximately 30% of VTE cancer patients did not receive any anticoagulation, with difference in treatment patterns between VTE cancer and active cancer patients. Active cancer patients had higher incidence rates of VTE recurrence and bleeding events compared to all VTE cancer patients.

PCV6

CONCOMITANT SLEEP DISORDER SIGNIFICANTLY ENHANCES THE RISK OF CARDIOVASCULAR DISEASE IN PATIENTS WITH PSORIASIS

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OBJECTIVES: Sleep disorder (SD) is a common problem for patients with psoriasis and both psoriasis and SD are each strongly associated with cardiovascular disease and metabolic syndrome. The aim of this study was to evaluate the impact of SD on psoriatics in terms of cardiovascular disease development. **METHODS:** We conducted a cohort study investigating 99,628 adults with psoriasis from 2004 to 2010 by using the Taiwan National Health Insurance Research Database. Concomitant SD with psoriasis was defined as the development of SD within 6 months after the diagnosis of psoriasis. The risk of ischemic heart disease (IHD) in patients with SD compared with patients without SD was analyzed using Cox proportional hazards regression models including sex, age, medications and comorbidities. **RESULTS:** After adjustment for covariates, psoriasis patients with concomitant SD had significantly higher risks for IHD (adjusted Hazard ratio (aHR), 1.25; 95% confidence interval (CI), 1.22–1.29) than patients without SD. Moreover, the increased risk of IHD conferred by SD paralleled the dose of hypnotics used. The SD effect on the risk of IHD was higher in young patients aged 18 to 34 than in middle-aged and older adults. Further stratified analysis showed that SD, including apnea and non-apnea SD, remained significantly associated with elevated risk of IHD in all subgroups of psoriasis: mild, severe psoriasis and patients with/without psoriatic arthritis. **CONCLUSIONS:** Psoriasis patients with SD were at increased risk for developing IHD compared to patients without SD, with higher attributable risk in younger patients. Moreover, the risks of IHD increased in parallel with the severity of SD.

PCV7

VALIDATION OF HYPERTENSIVE PATIENT IDENTIFICATION AND EFFECT OF VARYING OBSERVATION TIME FROM ADMINISTRATIVE CLAIMS DATA USING ELECTRONIC MEDICAL RECORDS

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OBJECTIVES: To examine the performance of various administrative claims-based algorithms with varying observation times for identifying patients with hypertension. **METHODS:** This retrospective analysis utilized administrative claims data linked with electronic medical records (EMR). Patients were identified in claims data using two observation time periods, 11/2010 to 12/2013 (EMR data availability) and 01/2006 to 12/2013 (entire claims data availability). Various claims-based hypertension algorithms were defined using ICD-9 diagnosis codes from medical claims and antihypertensive medications from pharmacy claims. Sensitivity and specificity were computed for each of claims-based algorithm and the two observation time periods using hypertension diagnoses from the EMR patient problem list as the gold standard. **RESULTS:** From a total of 10,864 patients with integrated data, 3,272 were identified with hypertension in EMR. When using claims in the same period as EMR availability, medical claims only based algorithms requiring one, two, or three diagnoses resulted in sensitivities of 83.3%, 75.0%, and 67.8% and specificities of 89.4%, 93.0%, and 94.6%, respectively, while the medical plus pharmacy claims based algorithms requiring pharmacy claim for an antihypertensive plus one, two, or three diagnoses resulted in sensitivities of 74.3%, 69.6%, and 64.0% and specificities of 92.7%, 94.2%, and 95.2%, respectively. By contrast, when using the entire claims data availability, the same medical claims only based algorithms resulted in sensitivities of 91.9%, 89.4%, and 86.2% and specificities of 77.3%, 81.8%, and 84.1%, respectively, while the same medical plus pharmacy claims based algorithms resulted in sensitivities of 85.6%, 84.3%, and 82.1% and specificities of 85.3%, 86.4%, and 87.2%, respectively. **CONCLUSIONS:** Claims-based algorithms for identifying hypertensive patients vary on criteria and observation time of the data. Sensitivities are higher with medical claims only algorithms while specificities are higher when pharmacy claims are combined with medical claims. Longer observation time results in increased sensitivities and decreased specificities.