OBJECTIVES: Cardiac rhythm management devices (CRMD’s) have proven their clinical value in the treatment of cardiac rhythm disorders and have improved patient safety and complication rates during implantations of these devices. This study demonstrated the complications rates related to implantations of CRMD’s, and estimated the additional hospital stay cost and associated with managing these complications. METHODS: All consecutive patients from the same period of one year who received the recipients were subjected to CRMD’s implantation and furthermore were recruited and followed up for 2 years. Finally, data were analyzed for 98 patients who completed the two-year’s follow up, which is practically a total of 796 patient-years. RESULTS: From the 201 patients with initial pacemaker (PM) implantations, 6 (2.9%) patients had seven complications (5 patients had lead’s dislodgement, 1 of them twice and 1 patient developed pocket infection), while from the 117 PMs replacements (1.05%) patients we noted a complication (pocket erosion). 3 patients, with a complication (1 with an initial PM and 1 with replacement) died before they complete the follow up from reasons unrelated to cardiac causes. There weren’t any other complications neither in implantations (69 patients) nor in replacements (31 patients). A MD and a plantable cardiac device (ICD). The average prolongation of the hospital stay was 7 days ranging from 1 to 35 days, resulting in 17 411 € of total additional direct hospital cost. CONCLUSIONS: This study provides relatively low rates of complications related to PMs during the implantation or replacement, in our center compared with others studies. In the case of ICD implantations, initials or replacements, there weren’t any complication. The additional hospitalization days and cost attributed to these complications depends on the nature of complication.

CVD1: REAL-WORLD COMPARATIVE EFFECTIVENESS AND SAFETY OF RIVAROXABAN IN NON-VALVULAR ATRIAL FIBRILLATION PATIENTS

OBJECTIVES: Rivaroxaban was shown to be effective in reducing the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation (AF) in a randomized controlled trial setting. The study objective was to assess real-world safety, effectiveness, and persistence of rivaroxaban and warfarin in nonvalvular AF patients. METHODS: Health care claims from Simphonic Health Solutions’ Patient Transactional Datasets from 5/2011-7/2012 were analyzed. Adult patients newly initiated on rivaroxaban or warfarin, with ≥2 AF diagnoses (ICD-9-CM: 427.31), and a CHADS2 score ≥1 during the 180-day baseline period were included. Cohorts were matched 1:4 using propensity score methods. Study outcomes were major bleeding, intracranial hemorrhage (ICH), gastrointestinal (GI) bleeding, composite stroke and systemic embolism, and venous thromboembolism (VTE) events (deep vein thrombosis, pulmonary embolism, deep vein thrombosis) and rates of treatment non-persistence. RESULTS: The matched sample included 3,654 rivaroxaban and 14,616 warfarin patients. Rivaroxaban was associated with significantly lower risk of treatment non-persistence (HR= 0.66, 95%CI: 0.60-0.73, p<0.001). Conclusions: This study suggests that rivaroxaban patients received rivaroxaban have significantly lower hospital length of stay as compared to patients receiving warfarin.

CVD2: EFFECT OF PRASUGREL VS CLOPIDOGREL ON HOSPITAL READMISSION AMONG ACUTE CORONARY SYNDROME PATIENTS TREATED WITH PRASUGREL

OBJECTIVES: During the last decade, the standard of care to treat acute coronary syndrome (ACS) patients was typically a combination of clopidogrel and aspirin. However, newer antiplatelet agents were approved recently. The aim of this study was to assess the effect on time-to-readmission and resource utilization of prasugrel vs. clopidogrel in prasugrel treated patients after hospitalization with an ACS event. METHODS: Based on the Truven Health Analytics MarketScan database from January 2009 through July 2012 a matched-cohort was created. Inferences for average treatment effect on time-to-readmission and numbers of hospitalizations, ER visits, and outpatient visits in prasugrel treated patients at 30 days and 1 year were performed by (1) frequentist Kaplan-Meier estimation with a log-rank test and Lin’s method for censored resource utilization outcomes; and (2) Bayesian discrete-time hazard models and negative binomial models. Bayes factors were also determined. RESULTS: 10,963 matched-pairs were well-balanced on baseline characteristics. Frequentist analyses of time-to-readmission at 1 year and resource utilization rates over 30 and 365 days showed no statistical differences between prasugrel and clopidogrel (log-rank test and Lin method p-values all >0.05). The posterior probability of equivalence between drugs for time-to-readmission at a margin of 10% was 98.7%, and based on the Bayes factor for superiority there is little evidence of superiority. Based on Bayesian analyses of resource utilization outcomes there are high probabilities of equivalence at a margin of 10% and little evidence of superiority for all outcomes except for number of hospitalizations at 30 days. Bayesian evidence that prasugrel is inferior to clopidogrel (95%-0.98), which translates to slightly lower utilization, although the probability that prasugrel is non-inferior to clopidogrel at the 10% margin is 0.765. CONCLUSIONS: ACS patients treated with prasugrel had time-to-readmission and resource utilization outcomes equivalent to what they would have been if treated with clopidogrel.

CVD3: COMPLICATIONS RELATED TO CARDIAC RHYTHM MANAGEMENT DEVICES (CRMD’S)’S THERAPY AND THEIR FINANCIAL IMPLICATION: A PROSPECTIVE SINGLE-CENTER TWO YEARS SURVEY

Patients who initially diagnosed at stage IV. Common sites of metastasis were bone (41.1%), brain (21.1%), lung (19.0%), and liver (15.8%). 24% were current smokers; 67.4% past (median 38 pack years). There were no differences in these characteristics by regimen. The most common comorbidities were COPD (30.5%) and diabetes (16.8%). Most patients were from the South (56.8%) vs. Northeast (13.7%), Midwest (21.1%) and West (8%). Patients from the non-South regions, χ² = 5239, df = 1, p = 0.0106. CONCLUSIONS: Patients treated for advanced NSCLC in real-world settings appear biographically and similarly to patients treated in clinical trials. Preliminary findings suggest regional differences in chemotherapeutic treatment patterns.