to apixaban. One-way and probabilistic sensitivity analyses indicated that model conclusion was robust across a wide range of inputs. CONCLUSIONS: Apixaban appears to be a dominant alternative to LMWH/exdabaxan for the treatment and prevention of VTE.

PCV14 REAL-WORLD EFFECTIVENESS OF AMLODIPINE/VALSARTAN/ HYDROXOCLOTHIIZIDE SINGLE-PILL COMBINATION IN THE TREATMENT OF PATIENTS WITH ESSENTIAL HYPERTENSION

Vriata D1, Antunes M2
1Novartis Farma – Produtos Farmacêuticos S.A., Porto Salvo, Portugal, 2Faculdade de Ciências da Universidade de Lisboa, Lisboa, Portugal

OBJECTIVES: Uncontrolled hypertension remains a major problem for health care systems worldwide, being strictly related to a persistently elevated burden of cardiovascular morbidity and mortality. Because of the multifactorial nature of hypertension, most patients require combination therapy to achieve blood pressure (BP) control. This analysis aimed to further investigate the effectiveness of amlopidine, valsartan/hydrochlorothiazide (A+V+h) single-pill combination in lowering the BP of hypertensive patients, previously assessed in an observational study. METHODS: This was a post hoc analysis, observational study conducted in 7132 patients diagnosed with essential hypertension and for whom treatment with A+V+h was indicated according to clinical practice. The observational period was 3 months. Descriptive analysis, hypothesis testing and linear regression models were performed. RESULTS: The reduction in systolic blood pressure (RSP) between baseline and last visit was significant: 25.73±17.51 (mean±SD) while the reduction in diastolic blood pressure (RDP) was 11.94±10.63 mmHg (mean±SD). A t-test showed that both reductions are statistically significant (p<0.001). Multiple linear regression models were fitted to RSP and RDP; to assess the influence of patients’ characteristics, comorbidities and previous treatment on the outcomes. The results show that on RCTs’ care, previous treatment and patient characteristic to be included in the study, the results allow to conclude that reduction found is mainly explained by the treatment with A+V+h single-pill combination.

PCV15 A MIXED TREATMENT COMPARISON (MTC) TO COMPARE THE EFFICACY OF ANTI-THROMBOTIC AGENTS IN TREATMENT AND SECONDARY PREVENTION OF VENOUS THROMBOEMBOLISM (VTE) IN PATIENTS WITH DEEP VEIN THROMBOSIS (DVT)

Edwards SJ, van Velthoven Mf, Crawford F
BM: Leiden University Medical Center

OBJECTIVES: New oral anticoagulants (NOACs) are available for the treatment and prevention of VTE, but evidence on their clinical effectiveness compared with existing treatments is limited. We compared the clinical effectiveness of edoxaban, dabigatran and rivaroxaban using adjusted standard dose warfarin (warfarin) as a common comparator in patients with index DVT. This research was conducted during a review of the company’s submission (CS) to the National Institute for Health and Care Excellence (NICE). Single Thrombosis Appraisal programme for the oral direct factor Xa inhibitor, edoxaban. METHODS: Randomised controlled trials (RCTs) for inclusion were identified using the CS for edoxaban (as part of the Thrombosis Appraisal (TA) 600). We assessed RCTs for comparability based on patient population, disease severity, and treatments received. We conducted a Bayesian MTC and explored fixed and random effects models. Odds ratio (OR) was the summary statistic for VTE recurrence and major bleed. RESULTS: The network of RCTs formed a “radiating star.” The Deviance Information Criterion (DIC) and the residual deviance with the number of unconstrained data points for both outcomes showed fixed and random effects models were an equally good fit. Due to the small number of studies and the shape of the network, the results from the fixed effects model are presented. Results compared to warfarin were (OR=1 favours warfarin): VTE recurrence edoxaban OR 0.95 (95% CI: 0.60–1.10), dabigatran OR 0.67 (95% CI: 0.38–1.20), rivaroxaban OR 0.64 (95% CI: 0.40–0.96), major bleed edoxaban OR 0.84 (95% CI: 0.48–1.35), dabigatran OR 0.83 (95% CI: 0.50–1.31), rivaroxaban OR 0.92 (95% CI: 0.37–1.90). CONCLUSIONS: Rivaroxaban demonstrated a 36% reduction in risk of VTE recurrence compared to warfarin that was statistically significant at the 5% level. We did not identify other significant differences either when comparing NOACs to warfarin or when comparing NOACs with each other.

PCV16 COMPARATIVE EFFECTIVENESS OF TICAGRELOR VS. PRASUGREL IN PATIENTS WITH ACUTE CORONARY SYNDROME

Kim K, Lee TA, Anjan AK, Dijeh DB, Tchouette D, Walton SM
University of Illinois at Chicago, Chicago, IL, USA

OBJECTIVES: Randomized controlled trials have provided evidence that both prasugrel and ticagrelor significantly reduce complications in patients with acute coronary syndrome (ACS). However, no head-to-head comparisons were performed between these three-generation drugs. The aim of this study was to compare the hospital admission rates between patients receiving ticagrelor and prasugrel for the preference of percutaneous coronary intervention (PCI). METHODS: A Retrospective cohort study was designed to compare all cause hospitalization over 365 days post PCI discharge. Patients who received PCI with an ACS hospitalization between January 2012 and December 2013 was extracted from the MarketScan Research database. Eligible patients filled either a prasugrel or ticagrelor prescription within 14 days from the discharge date. To be included in the analytic cohort, patients needed to be continuously enrolled in the data for six months prior to the index admission, and comorbid conditions that over period were assessed using Chi-square and Student t- tests for categorical and continuous variables, respectively. The effectiveness of PCV12 drugs on the time-to-first hospital re-admission was determined using a Cox-proportional hazard regression model. We controlled for potential confounders whose p-values at the baseline comparison were less than 0.1. RESULTS: A total of 9698 patients received PCI with a primary diagnosis of ACS and positive prasugrel (n=4320) and ticagrelor (n=5378) group. The ticagrelor group was older and more likely to have a diagnosis of intracranial hemorrhage, cerebrovascular accident, cardiac disorders and renal disorders than the prasugrel group. The adjusted HR of re-admission for ticagrelor was 1.056 [95% CI: 0.867, 1.285] which was unchanged after controlling for the potential confounders (HR: 1.056 [95% CI: 0.867 – 1.280]). CONCLUSIONS: The selection of third-generation antiplalet agents following PCI was not associated with a clinically or statistically significant reduction in hospital-readmission.

PCV17 CAN DATA SIMULATION HELP EVALUATE HTA OUTCOMES OVER TIME AND FACILITATE EARLY DECISION-MAKING? A CASE STUDY OF TICAGRELOR IN ACUTE CORONARY SYNDROME IN THE UK

Dequn F, Cooper NJ, Abrams K
University of Leicester, Leicester, UK

BACKGROUND: In October 2011, the National Institute for Health and Care Excellence (NICE) recommended the use of ticagrelor in adult patients presenting with acute coronary syndrome (ACS) in England and Wales. The relative effectiveness and cost-effectiveness of ticagrelor compared to clopidogrel—the current standard of care in the NHS—were based on results from one large multicentre study including over 18,000 ACS patients. Patients were recruited from October 2006 to June 2008 and primary trial data analysis was completed in September 2009, demonstrated that ticagrelor significantly reduced the rate of death, myocardial infarction (MI), and/or stroke versus clopidogrel. Delays in completing and reporting results to new valuable treatments, however, data simulation may allow for the continuous modelling of trial results and support early HTA submissions. OBJECTIVES: Using a data simulation approach to estimate ticagrelor vs. clopidogrel’s effectiveness over time, to determine relevant time horizons. At final analysis, we explore whether a trial design with shorter follow-up or the publication of an interim analysis could have resulted in a positive NICE decision at an earlier time point. METHODS: Time-to-event data was extracted from published individual patient data and efficacy simulations including censoring and recruitment distributions. The relative effectiveness of ticagrelor was assessed as a continuum from 2006 to 2009, and the probability of ticagrelor being cost-effective in the UK was also evaluated over time using a trial-based economic model. RESULTS: Despite increased uncertainty around the probabilities of death, MI and stroke estimated from immature trial data, results suggest that ticagrelor was a cost-effective alternative to clopidogrel before the original complete 12 months follow-up. CONCLUSIONS: Data simulation allowed us to evaluate HTA outcomes prior to the original planned analysis which, in retrospect, could have led to an earlier NICE recommendation for ticagrelor in ACS.

PCV18 ASPIRIN VERSUS CLOPIDOGREL IN PATIENTS WITH ISCHEMIC STROKE: A COST AND EFFECTIVENESS COMPARISON FROM BEIJING MEDICAL INSURANCE DATABASE

Wen L1, Wu J, Yang L1
1Yeking University, Beijing, China, 2Bayer, Beijing, China

OBJECTIVES: To compare the cost-effectiveness of aspirin and clopidogrel in ischemic stroke patients from data of Beijing medical insurance database. METHODS: We randomly selected 10% of patients diagnosed as IS in the first time during January 2012- December 2013 and then followed their inpatient records, a prescription record and visited patients in the months from 2013 to 2014. RESULTS: We divided patients into 5 groups according to the proportion of aspirin prescription by 0.010, 0.601-99.40, 40-60 0-60%, 0.39-9.9% and 0(clopidogrel only). We compared the rate of occurrences, cost of anti-platelet drugs and rate of hemorrhage events in different drug utilization groups. The Kruskal-Wallis test and Bartlett’s test were used in the analysis. RESULTS: 4301 patients were identified(4289±27.13, male 63.19%, 1477 (34.34%) patients used aspirin only, 1938 (45.06%) patients used 60-100% aspirin, 465 (10.81%) patients used 40-60% aspirin, 335 (7.78%) patients used aspirin 0-40% and 86 (2.01%) patients used clopidogrel only patients with only aspirin recurred less than patients with both aspirin and clopidogrel prescription, patients with 60-100% aspirin prescription received less than patients with less aspirin prescription. patients with aspirin prescription only spent less on anti-platelet drugs than that of patients with both aspirin and clopidogrel prescription(p<0.01). The rates of hemorrhage events for IS patients of different drug groups showed no significant difference(p<0.05). CONCLUSIONS: IS patients used more aspirin for anti-platelet treatment. The cost of anti-platelet drugs and rate of occurrence of patients who used aspirin only was lower, while no significant difference was found in hemorrhage events rates among different drug groups.

PCV19 A MIXED TREATMENT COMPARISON (MTC) TO COMPARE THE EFFICACY OF ANTI-THROMBOTIC AGENTS IN THE ACUTE TREATMENT OF VENOUS THROMBOEMBOLISM (VTE) IN PATIENTS WITH ACTIVE CANCER

Edwards SJ, Wakefield V, Karner C
BM: London, UK

OBJECTIVES: New oral anticoagulants (NOACs) are available for the treatment and prevention of VTE but evidence on their clinical effectiveness compared with existing treatments is limited. This research compared the clinical effectiveness of dabigatran, rivaroxaban, adjusted standard dose warfarin (warfarin) and low molecular weight heparin (LMWH) in people with active cancer following VTE. This research was con-