overall group (33% vs. 20%; p < 0.0001) and versus the atorvastatin group (34% vs. 24%; p < 0.001). CONCLUSIONS: Propensity-matched analysis of high-risk patients initiating statins indicated that rosuvastatin was significantly more likely to reduce LDL-C compared with all other statins grouped together and compared with atorvastatin alone in this real world patient population.

PCV17 SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS OF ALL AGENTS FOR STROKE FREQUENCY IN PATIENTS WITH ATRIAL FIBRILLATION

Tsoika A1, Pechivanouglou F2, Bielecki J3, Krah MD2
1University of Toronto, Toronto, ON, Canada, 2Toronto Health Economics and Technology Assessment (THETA) Collaborative, Toronto, ON, Canada

OBJECTIVES: To compare the relative effectiveness and safety of all stroke prevention agents in patients with atrial fibrillation (AF) through a systematic review and network meta-analyses. METHODS: A search of MEDLINE, EMBASE, and CENTRAL was conducted (through December 2013) to identify Phase III randomized controlled trials of AF patients, comparing any two of the following agents: placebo, aspirin, aspirin and clopidogrel combination therapy (A+C), adjusted-dose warfarin (target INR 2-3.0), dabigatran (110 mg and 150 mg), rivaroxaban, apixaban, and edoxaban (150, 30 mg and 15 mg). Randomized withdrawing data from three pivotal randomized controlled trials: ARISTOTLE, RE-LY, and VIBRANT-HEART respectively. A Bayesian NMA was performed using a fractional polynomial model synthesizing data from clinical trials that “the lower LDL-C the better”. Improvements in goal attainment were associated with a lower composite cardiovascular outcome compared to patients with a LDL-C < 70 mg/dL but was not statistically significant (adjusted HR = 0.72, 95%CI = 0.37 – 1.42; p-value = 0.346). CONCLUSION: Acute coronary syndrome patients who received statins and achieved a LDL-C of < 70 mg/dL were more likely to have less cardiovascular outcomes, confirming the data from clinical trials that achieving LDL-C, the better

PCV18 COMPARATIVE EFFICACY OF NEW ORAL ANTICOAGULANTS FOR STROKE PREVENTION IN ATRIAL FIBRILLATION AMONG PATIENTS WITH PRIOR STROKE OR SYSTEMIC EMBOLISM

Chong C1, Keen A2, Benger J3, Chen M2
1St George Hospital, Sydney, NSW, Australia, 2University of Sydney, Sydney, NSW, Australia

OBJECTIVES: Patients with atrial fibrillation (AF) and a previous stroke or transient ischaemic attack (TIA) have a high risk of stroke and may have a different baseline risk than patients without previous stroke or TIA, which may act as a treatment effect modifier. Therefore, the comparative efficacy of new oral anticoagulants (NOACs) in terms of stroke or systemic embolism (SE) was assessed for the subset of patients with a previous stroke or TIA. METHODS: A Bayesian network meta-analysis (NMA) was performed for patients with previous stroke or TIA from three pivotal randomized controlled trials: ARISTOTLE, RE-LY, and ROCKET-AF, which compared dabigatran, rivaroxaban, and apixaban with warfarin, respectively. Parametric survival functions were used to model the hazard ratios (HR) over time for the compared interventions, and the difference in the shape and scale parameters of the functions was synthesized and incorporated into a NMA. Results were compared to an analysis of constant HRs as well as to previous NMA for this subgroup. RESULTS: The time-varying HRs for the treatments versus warfarin suggest that each NOAC is at least as efficacious as warfarin with respect to stroke and SE. The HR for dabigatran 110mg was fairly constant over time (range: 0.93-0.98). The HR for dabigatran 150mg decreased slightly over time (range: 0.78-0.96), whereas the HRs increased slightly over time for rivaroxaban (range: 0.59-1.17) and apixaban (range: 0.59-1.17). The HRs for this treatment comparison versus warfarin were transformed into cumulative hazard rates per treatment. CONCLUSIONS: Based on the NMA of stroke or SE among the intention to treat population with AF, dabigatran 110mg was expected to be comparable to warfarin for the first 5 months and more efficacious up until 30 months; rivaroxaban and apixaban are expected to be more efficacious than warfarin for the first 11 and 12 months, respectively, and comparable to warfarin thereafter.

PCV19 A NETWORK META-ANALYSIS EVALUATING THE CUMULATIVE HAZARD RATE OF STROKE OR SYSTEMIC EMBOLISM FOR NEW ORAL ANTICOAGULANTS IN STROKE PREVENTION FOR ATRIAL FIBRILLATION PATIENTS

Chong C1, Keen A2, Benger J3, Chen M2
1St George Hospital, Sydney, NSW, Australia, 2University of Sydney, Sydney, NSW, Australia

OBJECTIVES: In order to indirectly compare new oral anticoagulants (NOACs) for patients with atrial fibrillation (AF), several network meta-analyses (NMA) have compared the number of patients with stroke or systemic embolism (SE) at study end. The aim of the present analysis was to assess the comparative efficacy of NOACs in the cumulative hazard rate of the events including stroke, SE, and a complementary efficacy overview time, using the published cumulative hazard rates. METHODS: A Bayesian NMA was performed using a fractional polynomial model synthesizing data from three pivotal randomized controlled trials: ARISTOTLE, RE-LY, and ROCKET-AF, which compared dabigatran, rivaroxaban, and apixaban versus warfarin. Parametric survival functions were used to model the hazard rate over time for the compared interventions and the difference in the shape and scale parameters of the functions was synthesized and indirectly compared. The efficacy of NOACs was evaluated and compared to constant HRs from previ-
trolled trials (RCTs) evaluating Dabigatran for the treatment of AF. We included stud-
ies that (1) were RCT in humans; (2) an investigation of patients with nonvalvular atrial fibrillation; (3) an evaluation of dabigatran compared with warfarin or each other; and (4) a report of results of stroke or systemic emboli and major bleeding. A systematic literature search for dabigatran trials was undertaken for the databases PubMed, Embase, and Google Scholar. Data were abstracted for each study: study size, interventions, year and total bleeding events. For meta-analysis, random effects and fixed effects models were used to obtain cumulative statistics. RESULTS: Two RCTs with a total of 12,268 patients were identified. The pooled event rate for dabigatran for total bleeding events was 31.9% (95% CI 31%–33%). The pooled response rate for warfarin for total bleeding events was 35.1% (95% CI 34%–37%). The cumulative relative risk for total bleeding events with Dabigatran versus Warfarin was 0.92 (95% CI 0.89–0.95). CONCLUSIONS: Meta-analysis shows dabigatran has a slightly lower rate of total bleeding events compared to Warfarin.

PCV23
COST AND OUTCOMES OF ANTIHYPERTENSIVE TREATMENTS IN ASIAN INDIAN PATIENTS
Triveni L1, Panchal M1, Kochhar A2
1National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar, India
2Fortis Health, Mulund, Mumbai, India
OBJECTIVES: The objective of the study was to determine the costs and clinical outcomes of antihypertensive treatments patients taking amlopidine or telmisartan.
METHODS: This year long prospective clinical study was carried out at cardiology OPD of a private tertiary health care hospital. The patients over 40 years of age, either sex, with clinically diagnosed hypertension (INC VII) receiving either amlopidine ( swallowed tablet [OD] or amlopidine and telmisartan for a period of at least 8 weeks after baseline assessment. An attempt made to understand the direct costs involved. The primary outcome measured was difference in SBP and DBP after 8 weeks of treatment vs. baseline BP. Only the direct costs were included.
RESULTS: Of 250 patients studied, 120 belonged to the amlopidine and 130 to the telmisartan group. 150 had a family history of hypertension. The average age, weight, height, BMI, baseline SBP and DBP and duration of hypertension did not differ between amlopidine and telmisartan group. The prevalence of CAD was more in male patients; and, the prevalence of diabetes was more in females. The average reduction in SBP was amlopidine and telmisartan group was 17.9±10.2mmHg and 18.48±13.6 mmHg. However, at the end of the minimal follow up period, there was no statistically significant difference found in reduction of SBP. BP control was significantly different in reduction of DBP at the end of the minimal follow up period, there was no statistically significant difference found in reduction of DBP. BP control was significantly different in reduction of DBP. Indapamide records decline in consumption in next two years. In 2011 and 2012 hydrochlorothiazide takes second place in consumption and marks a positive trend. In 2011 it ranged 7.92 DDD/1000 inh/day. Spironolactone takes the fourth position in the first three years. During the 2011 and 2012 consumption of spironolactone has increased and took the third position in consumption. Consumption of all other diuretics was small. CONCLUSIONS: In Serbia, in the observed period, consumption of diuretics is two to three times lower than in the international comparison with the consumption of diuretics in Norway and Finland. This research was supported by Provincial Secretariat for Science and Technological Development, Autonomous Province of Vojvodina project No 114-451-245/A/2011 and by Ministry of Science, Republic of Serbia, project no 41012.

PCV24
BURDEN OF MAJOR ADVERSE CARDIAC EVENTS (MACE) IN PATIENTS WITH CORONARY ARTERY DISEASE (CAD) OR PERIPHERAL ARTERIAL DISEASE (PAD) (Cohort 1): Duretti M1, 2, Vukmirovic S1, Njiru L1, Westergaard M1, 2
1LASER Analytica, Montreal, QC, Canada, 2Bayer Pharma AG, Wuppertal, Germany
OBJECTIVES: Patients with a history of a cardiovascular (CV) disease are at high risk of developing secondary major adverse cardiac events (MACE), including death, non-fatal myocardial infarction (MI), stroke, symptomatic pulmonary embolism, CV and all-cause mortality. The objective of this study was to determine the cumulative event rate of CV and burden of MACE in patients with coronary artery disease (CAD) or peripheral arterial disease (PAD) in Europe, Asia, Latin America and Canada. METHODS: A comprehensive search was conducted in PubMed, Embase, Cochrane and other relevant sites. 460 full-text articles, published between 2003 and 2013, were reviewed.
RESULTS: MACE was more prevalent in CAD/PAD patients compared to matched controls (> 2-fold higher). Proportions of CAD patients who have had MI, stroke, or bleeding were 1.4%–3.0%, 1.24% and 0.81%, respectively. For PAD patients, these proportions were 1.37%–13.7%, 0.4%–5.2%, and 1.3%, respectively. Compared to individuals with no CV disease, MACE incidence in CAD or PAD patients was increased by at least two-fold, ranging from 18.1%–32.3% for all-cause death, 12.1%–18% for CV death, 8.2%–17.3% for MI and 6.8%–11.3% for stroke. In patients with CAD, evidence of MACE was reported within 30 days of primary percutaneous coronary intervention and incidence increased over time. The main risk factors for MACE in CAD/PAD patients included increased oxidative stress in coronary and peripheral arteries, diabetes, and chronic kidney disease. Limited information was found on the economic and humanistic burden of MACE in CAD/PAD patients. Available data showed that MACE occurrence increased hospitalization rates and associated costs, in addition to worsening patients’ quality of life. CONCLUSIONS: Although gaps in the literature were identified, this assessment showed that the risk and burden of MACE in CAD/PAD patients imposes a considerable burden. Development of preventive measures is warranted.

PCV29
RATES OF ACUTE CORONARY EVENTS AND ALL CAUSE MORTALITY IN PATIENTS WITH STABLE CORONARY ARTERY DISEASE (CAD) AFTER MYOCARDIAL INFARCTION AND ADDITIONAL CARDIOVASCULAR RISK FACTORS
Devere S1, Mollistom C2, Hunt PR3, Kern DM4, Tunceli O5, Wu B6, Westergaard M2, Hamm M7
1AstraZeneca, Wilmington, DE, USA, 2AstraZeneca, Möln达尔, Sweden, 3Evidenza, Lexington, MA, USA, 4HealthCare, Inc., Wilmington, DE, USA
OBJECTIVES: Warfarin, a widely prescribed oral anticoagulant, is well known to have a narrow therapeutic index. Many studies confirmed that adherence helps to achieve a stabilization of the INR, but little data is available on the impact of the use of a pillbox. The objective of this study is to evaluate the association between the use of new warfarin-users and time in therapeutic range (TTR). METHODS: This study was based on a prospective cohort of new warfarin-users which aims to assess the genetic, clinical and environmental risk factors associated with the effectiveness and safety of warfarin. Demographic and clinical data were collected among a sub-sample of 702 patients who began the treatment between May 1st, 2010 and Aug, 31st, 2012 at one of 18 hospitals in Quebec, Canada. Patients were follow-up each three months up to a year after the initiation of warfarin. Our outcome was the TTR and it was tested using a mixed linear model to allow for repeated measures. RESULTS: Mean age was 70.0±11.6, 69% were men, 79% had atrial fibrillation as a primary indication for warfarin, 67.9% had hypertension and 61.1% had dyslipidemia. Of these patients, 47.2%, 53.1%, 56.1% and 60.4% used a pillbox at 3, 6, 9 and 12 months, respec-
respectively, 29% who used their own pillbox (approximate rate of pillbox users) had a higher TTR than non-users (3.7, p<0.03). These results were adjusted for the INR target, age, number of concomitant drugs and patient-reported dose of warfarin as these covariates were significantly associated with the outcome. CONCLUSIONS: The use of a Pillbox prepared by the patient at home and a higher TTR. The use of this device may improve the stability of patients taking warfarin, but the clinical significance of this finding is arguable.