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

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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 (high and low doses). We conducted fixed-effects Bayesian network meta-analyses of the patients initiating statins indicated that rosuvastatin was significantly more likely to be ranked best at reducing ischemic stroke risk, and low-dose 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 (high and low doses). We conducted fixed-effects Bayesian network meta-analyses of the

RESULTS: We identified 12 studies, comprising 81,771 patients. Compared to warfarin, dabigatran 150 mg (RR 0.65, 95% CI 0.52-0.82) and apixaban (RR 0.80, 95% 0.66-0.96) reduced the risk of all strokes. Dabigatran 150 mg was also more effective than warfarin at reducing ischemic stroke risk (RR 0.77, 95% CI 0.59–0.99). All anticoagulants were more effective than A+C, aspirin and placebo at reducing the risk of ischemic and all strokes. All treatments were associated with a lower risk of major bleeding, except for dabigatran 150 mg, rivaroxaban, A+C, and aspirin. Dabigatran 150 mg was most likely to be ranked best at reducing ischemic stroke risk, and low-dose edoxaban as effective as A+C at reducing major bleeding risk. CONCLUSIONS: Anticoagulants effectively reduce the risk of ischemic and all strokes in AF patients, and are more effective than antplatelets. Some novel anticoagulants are associated with lower stroke and/or major bleeding risk than warfarin. In addition to a drug’s safety and effective than antiplatelets. Some novel anticoagulants are associated with lower

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

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OBJECTIVES: Patients with atrial fibrillation (AF) and a previous stroke or transient ischemic 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 subgroups 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 aspirin and NOACs, dabigatran, and rivaroxaban, 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 these functions was synthesized and indirectly compared. 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 110 mg was fairly constant over time (range: 0.80-0.68). The HR for dabigatran 150mg decreased slightly over time (range: 1.82-0.40), whereas the HRs increased slightly over time for rivaroxaban (range: 0.61-1.34) and apixaban (range: 0.62-0.94). CONCLUSIONS: Based on the NMA of stroke or SE among the intention to treat population with AF, dabigatran 150 mg 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

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OBJECTIVES: To indirectly compare new oral anticoagulants (NOACs) for patients with atrial fibrillation (AF) based on a network meta-analysis (NMA) of the cumulative hazard rate of stroke or systemic embolism (SE) at study end. The aim of the present analysis was to assess the comparative efficacy of NOACs in the management of the risk of stroke and/or systemic embolism. METHODS: A Bayesian NMA was performed using a fractional polynomial model synthesising data from three pivotal randomized controlled trials: ARISTOTLE, RE-LY, and ROCKET-AF, which compared aspirin, dabigatran and rivaroxaban 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 these functions was synthesized and indirectly compared. The efficacy of NOACs was evaluated and compared to constant HRs from previ

ous NMA. RESULTS: The time-varying hazard ratios (HRs) versus warfarin suggest that NOACs are at least as efficacious as warfarin with respect to stroke and SE. The HR for dabigatran 110mg was fairly constant over time (range: 0.92-0.90). The HR for dabigatran 150mg decreased slightly over time (range: 0.78-0.56), whereas the HRs increased slightly over time for rivaroxaban (range: 0.59-1.17) and apixaban (range: 0.94-1.1). The HRs for each 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 150 mg was expected to be comparable to warfarin; dabigatran 110 mg 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.

PCV20
THE EFFECT OF LOW-DENSITY LIPOPROTEIN CHOLESTEROL GOAL ATTAINMENT ON CARDIOVASCULAR OUTCOMES IN PATIENTS WITH ACUTE CORONARY SYNDROME: A REAL WORLD PRACTICE IN THAILAND

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OBJECTIVES: Despite the known benefit of low-density lipoprotein cholesterol (LDL-C) goal attainment of less than 70 mg/dl in a reduced risk of cardiovascular outcomes, its effectiveness in acute coronary syndrome patients in Thailand is limited. This study aimed to assess the effect of LDL-C goal attainment on first composite cardiovascular outcomes. METHODS: A retrospective cohort study was conducted using medical charts of patients who were hospitalized for acute coronary syndrome and were treated with statins in two hospital settings in Bangkok in 2009 and 2012. After admission, patients were followed from the date of LDL-C goal assessment until the first event of composite cardiovascular outcomes (myocardial infarction, stroke, and death) or death. A total of 409 patients were included. Main outcomes were successional LDL-C attainment for 60 months (60% matching). The percentage of the patients attained a LDL-C goal of <70 mg/dl, 38% had LDL-C between 70 and 99 mg/dl and 35% had LDL-C of 100–199 mg/dl. Forty-six patients experienced a composite cardiovascular outcome. Patients achieving a LDL-C of <70 mg/dl was associated with a lower composite cardiovascular outcome compared to patients with a LDL-C > 100 mg/dl, which was not statistically significant (adjusted HR= 0.72, 95%CI: 0.37 – 1.42; p-value=0.346). CONCLUSIONS: Acute coronary syndrome patients who received stints and achieved a LDL-C of <70 mg/dl were more likely to have less cardiovascular outcomes, confirming the data from clinical trials that LDL-C < 100 mg/dl is the better. Improvements in goal attainment for LDL-C are encouraging.

PCV21
COMPARATIVE SAFETY AND EFFICACY OF CYROCATHETER ABLATION VERSUS RADIOFREQUENCY CATHETER ABLATION FOR TACHYARRHYTHMIAS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: Tachyarrhythmias is a significant burden to a variety of cardiovascular diseases. Tachyarrhythmia outcomes compared to a patients with tachyar- rhythmia. METHODS: We systematically and critically evaluated the current evidence on the use of cryocatheter ablation (CA) compared with radiofrequency catheter ablation (RFCA) in patients with tachyar- rhythmi. RESULTS: A total of 8 RCTs comparing cryoablation with radiofrequency ablation (RFA) were included. Cox proportional hazard models were used to determine the effect of CA compared with RFA on the cardiovascular outcomes. RESULTS: A total of 405 patients were included. Main outcomes were freedom from AVNRT or clinical recurrence (RR 0.95, 95% CI 0.91-0.99, p-value=0.003). Patients with a CA between 70-99 mg/dl had a lower composite cardiovascular outcome compared to patients with a LDL-C > 100 mg/dl, but this was not statistically significant (adjusted HR= 0.72, 95%CI: 0.37 – 1.42; p-value=0.346.). CONCLUSIONS: Acute coronary syndrome patients who received stents and achieved a LDL-C of <70 mg/dl were more likely to have less cardiovascular outcomes, confirming the data from clinical trials that LDL-C < 100 mg/dl is the better. Improvements in goal attainment for LDL-C are encouraging.

PCV22
ANALYSIS OF SAFETY OF DABIGATRAN AND WARFARIN FOR ATRIAL FIBRILLATION

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OBJECTIVES: Dabigatran (150 mg) is an irreversible and often rapid heart rate that commonly causes poor blood flow to the body. Dabigatran and Warfarin have shown safety and efficacy for treatment of AF. The objective of this study was to conduct meta-analysis and present evidence for safety of Dabigatran versus Warfarin for treatment of AF. METHODS: For this meta-analysis, we published randomized con-