THE EFFECT OF ANTICOAGULATION FOR STROKE PREVENTION IN PATIENTS WITH ATRIAL FIBRILLATION—COMPARING EFFICACY AND EFFECTIVENESS
De Wilde S1, Sorensen SV2, Brown R3, Monz BU4
1The MEDTAP Institute at UBC, Brussels, Belgium; 2The MEDTAP Institute at UBC, Bethesda, MD, USA; 3MedTap Institute at UBC, London, UK; 4Boehringer Ingelheim, Ingelheim, Germany

OBJECTIVES: To investigate different scenarios of warfarin treatment for patients with non-valvular atrial fibrillation who are eligible to receive anticoagulation for stroke prevention. Scenarios include different proportions of eligible patients being treated, as well as the level of anticoagulation obtained (i.e., within and outside the recommended INR range). METHODS: A decision-analytical model was constructed from a third party payer perspective for the US. The model runs for five years in yearly cycles. Strokes (fatal, major, minor and no deficit) and bleeding events (fatal, intracranial, major and minor) were modeled. Probabilities and costs associated with events were taken from published sources. Four scenarios were compared: 1). 100% of eligible patients warfarin treated and all within the therapeutic range; 2). 100% of eligible patients’ warfarin treated whereof 67% within and 33% outside the therapeutic range (randomized controlled trial-like); 3). 100% of eligible patients warfarin treated whereof 50% within/outside the therapeutic range (routine practice INR levels); and 4). 55% warfarin treated (of whom 50% within/outside recommended INR range), 3% no treatment, and 40% aspirin (routine practice for warfarin treatment rates and INR levels). RESULTS: At 5 years, total costs per patient (discounted at 3%) were for strategy 1: $8607 and 2.5, for strategy 2: $12,518 and 46, for strategy 3: $14,582 and 58, and for strategy 4: $15,480 and 129, respectively. CONCLUSIONS: In a real world setting, evidence demonstrates that patient’s eligible for anticoagulation may not be treated, and those treated with warfarin may not be in the therapeutic range for anticoagulation. This will lead to marked differences between the observed efficacy and effectiveness as demonstrated for the number of strokes and costs in this model. This will need to be addressed in any cost-effectiveness analysis using warfarin as comparator.

PCV10

DRIVERS OF UNDERUSE OF VITAMIN K ANTAGONISTS IN PATIENTS WITH CHRONIC NONVALVULAR ATRIAL FIBRILLATION IN FRANCE: THE ENSEFAL STUDY
Guenoun M1, Le Jeunne P2, Lamekque H3
1Clinique Bouchard, Marseille, France; 2BKL-Thales, Boulogne Bilancourt, France; 3AstraZeneca France, Rueil-Malmaison, France

OBJECTIVES: Describe prevalence and characteristics of patients with chronic nonvalvular atrial fibrillation (NVAF) and ≥1 risk factor (RF) for thromboembolism in France in 2004, and document reasons for vitamin K antagonists (VKA) underuse in those patients for whom anticoagulation is indicated. METHODS: Cross sectional study. All patients with arrhythmia or AF presenting to cardiologists (n = 43) from the THALES observatory during a 3-month period were evaluated via questionnaire. Statistical comparisons were by chi² and ANOVA analyses. Data were extrapolated using the THALES database to give representative national values. RESULTS: 409 patients met the inclusion criteria, i.e., confirmed NVAF and ≥1 thromboembolic RF (mean age 76 years; mean number of thromboembolic RF 2.11; 58.7% male). Of these, 37.2% had 1 RF, 28.9% had 2 RF and 34.0% had ≥3 RF. VKA was prescribed to 65.5% of patients. VKA treatment was associated with a higher mean number of RF (2.28) than aspirin (2.20) or no treatment (1.61). Among VKA-treated patients, 18.6% were judged difficult to stabilise/not stabilised by the physician. Main reasons for not prescribing VKA were insufficient risk: benefit (37.6%), patient’s refusal due to VKA restrictions (23.4%) and patient’s inherent haemorrhagic risk (19.1%). According to anticoagulation exclusion criteria (severe hepatic insufficiency, recent stroke, and patient’s inherent haemorrhagic risk) most patients not treated with VKA (77.3%) would have been eligible for anticoagulation. Extrapolation of these findings to the French population equated to 426,731 (95% CI 420,099–433,363) patients with chronic NVAF. Of these, 147,124 (34.5%) would not be treated with VKA, even though 113,719 would have been eligible for anticoagulation. CONCLUSIONS: These data suggest that one third of French patients with chronic NVAF and ≥1 thromboembolic RF presenting to cardiologists are currently not treated with VKA. Main drivers for this non-prescription are more related to risk and constraints of VKA treatment than formal contraindications.

PCV11

ANTICOAGULATION IN PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION: AN EVALUATION OF STABILITY AND EARLY FACTORS THAT PREDICT LONGER-TERM STABILITY ON WARFARIN IN A LARGE UK POPULATION
Currie CJ1, McEwan P2, Emmas C3, Peters JR4
1Cardiff University, Cardiff, UK; 2Cardiff University, Cardiff, Wales, UK; 3AstraZeneca-UK, Luton, Bedfordshire, UK; 4University Hospital of Wales, Cardiff, UK

OBJECTIVES: To determine the proportion of patients with non-valvular atrial fibrillation (NVAF) treated with warfarin that achieved INR stability. To then evaluate the associations between stability and outcome, and factors that predict stability. METHODS: A retrospective record linkage study in 1513 patients with NVAF treated with warfarin for a minimum of six months. The setting was a large UK population (~450,000 people). The main outcome measures were stability defined as six consecutive months within the target INR range (2.0–3.0), thromboembolic and bleeding event rates, and mortality. Secondary outcome measures included the predictive value of baseline characteristics and other treatment variables. RESULTS: Stability was achieved in 52% of the study group. Standardised mean survival was significantly higher in the group who achieved stability (Δ = 16.9 months, p < 0.001) with a hazard ratio of 4.36 (p < 0.001). The stable group had a lower rate of both thromboembolic events (0.8% vs. 2.3% per patient year) and major bleeds (0.4% vs. 1.2% per patient year). Failure to achieve stability was associated with age (odds ratio 1.01 (95% CI 1.001–1.021)) and morbidity at baseline (OR 1.015; 95% CI 1.007–1.022). Greater variability in INR was also associated with a failure to achieve stability (OR 1.518; 95% CI 1.007–1.022). Receiver operator characteristic (ROC) analysis using data from the first three months of treatment demonstrated good discrimination of stability using age and morbidity at baseline and percent time in range and frequency of visits during first three months treatment (AUC 0.780; SE 0.012; 95% CI 0.757–0.803). CONCLUSIONS: Many patients never achieved