PATIENTS WITH TICAGRELOR VERSUS CLOPIDOGREL IN HONG KONG: A COMPARISON OF STROKE IN AF PATIENTS WITH ONE OR MORE RISK FACTORS.

CONCLUSIONS: Cost-effectiveness models of pharmacologic SFAF have been extensively published, but none have estimated the comparative cost-effectiveness of newer agents. Models used similar structures and non-drug-specific inputs, and commonly find innovator strategies to be cost-effective.

PCV49
ECONOMIC EVALUATION OF RIVAROXABAN IN STROKE PREVENTION AMONG PATIENTS WITH ATRIAL FIBRILLATION IN GREECE

OBJECTIVES: To undertake an economic evaluation of rivaroxaban relative to the local standard of care, acenocoumarol, for stroke prevention in atrial fibrillation (AF) patients with one or more risk factors. A Markov model was developed to evaluate cost-effectiveness over a lifetime time horizon. Costs and benefits were discounted. A probabilistic sensitivity analysis reflecting the natural progression of AF patients through different health states was developed and adapted to the Greek setting. The analysis was undertaken from a payer perspective. Baseline event rates (adjusted to three month cycles) and relative treatment effects (RTEs) were derived from the safety on treatment analysis of the ROCKET AF study. Utility values for events were based on literature. A treatment-related disutility of 0.05 was applied to acenocoumarol arm. Costs assigned to each health state reflect local drug acquisition, monitoring, event management and transportation costs and reflect the year 2012. An incremental cost-effectiveness ratio (ICER) per quality-adjusted life-year (QALY) gained was calculated. One-way sensitivity analyses were conducted to identify key model drivers. Probabilistic analysis was undertaken to deal with uncertainty. The horizon of analysis was over patient life time and both cost and outcomes were discounted.

RESULTS: The average total cost of rivaroxaban-treated patients was €985 higher compared to acenocoumarol. Rivaroxaban was associated with additional drug acquisition costs (€5,275), however these were mostly offset by reduced monitoring (€3,947) and event costs (€343). Moreover, rivaroxaban was associated with a 0.22 increment in QALYs leading to an ICER of €4,517/QALY gained. Sensitivity analyses showed that the cost-effectiveness results are fairly robust with discontinuation rates of rivaroxaban, acenocoumarol monitoring visits, acenocoumarol-related utility decrement, RR for rivaroxaban versus acenocoumarol for stroke having the highest impact on results. Probabilistic analysis revealed a high probability of rivaroxaban being cost-effective at a threshold of €30,000 or €60,000/QALY.

CONCLUSIONS: Rivaroxaban may represent a cost-effective option for the prevention of stroke in AF patients with one or more risk factors.

PCV50
COST-EFFECTIVENESS ANALYSIS OF TREATING ACUTE CORONARY SYNDROME PATIENTS WITH TICAGRELOR VERSUS Clopidogrel IN HONG KONG: A MARKOV ANALYTIC MODEL

OBJECTIVES: In the PLATO study, ticagrelor significantly reduced the rate of myocardial infarction (MI), stroke, or death from vascular causes without a significant increase in major bleeding compared with clopidogrel. A Markov decision analytic model was used to assess the long term cost-effectiveness of ticagrelor versus clopidogrel in the management of ACS patients in Hong Kong. METHODS: A Markov decision analytic model was used to perform a cost-effectiveness analysis (CEA) of treating ACS patients for one year with ticagrelor compared with clopidogrel plus aspirin (group 2) from the Hong Kong Health care provider perspective. The model simulates a cohort of 45-year-old patients with ACS moving between different health status in each Markov cycle of 1 year. The time horizon was lifetime (85 years old). Health states included patient in ACS event without event, myocardial infarction (MI), and death from vascular cause. Outcome measures included lifetime costs, quality-adjusted life years (QALYs) gained and incremental cost-effectiveness ratios (ICERs). Event rates of group 1 are adopted from the PLATO study and rates of group 2 from the Prince of Wales Hospital ACS Registry in Hong Kong. Probabilistic sensitivity analyses using Monte Carlo simulations were conducted to assess parameter uncertainty. RESULTS: The ICER for ticagrelor compared to clopidogrel in the treatment of ACS was HK$34,415 (US$4,415) per QALY gained. For the subset of patients with previous non-ST-elevation myocardial infarction (STEMI) and non-ST-elevation ACS (NSTEACS), the ICERs per QALY gained were HK$33,402 (US$4,282) and HK$38,844 (€30,000) respectively. Ticagrelor treatment strategy was cost-effective over 99% of the Monte Carlo simulation using a cost-effectiveness threshold of <3 times gross domestic product (GDP) per capita in Hong Kong. CONCLUSIONS: The treatment of ACS patients with ticagrelor for 12 months is considered cost-effective compared with clopidogrel from a health care provider perspective.

PCV51
COST-EFFECTIVENESS OF RIVAROXABAN FOR THE PREVENTION OF STROKE AND SYSTEMIC EMBOLISM IN ADULT PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION (AF) IN GREECE: A COMPARISON OF TICAGRELOR WITH ONE OR MORE RISK FACTORS – A UK PERSPECTIVE

RESULTS: The cost of treatment with rivaroxaban was estimated at €17,499 in comparison to €18,205 for AML/VAL, €16,177 for AML/HRCTZ and €14,972 for AML/HCTZ. The cost of the single combination treatment with rivaroxaban was higher than the Greek GDP per capita (€9,649, 14,581 respectively), while the triple combination was found to be dominant in comparison with AML/VAL. Extensive sen-