Rosuvastatin therapy (MERCURY I) trial in which 3,140 adults with, or at risk of, coronary heart disease initially received a fixed daily dose of RSV 10 mg, ATV 10 or 20 mg, PRA 40 mg or SIM 20 mg. After 8 weeks' treatment, patients were randomised to remain on treatment or to switch treatments as follows: from ATV 10 mg, SIM 20 mg, PRA 40 mg to RSV 10 mg or from ATV 20 mg to RSV 10 or 20 mg for a further 8 weeks. In a decision-analysis model, it was assumed that patients not achieving goal on an alternative statin after 8 weeks would be switched to RSV. Costs for drug acquisition, primary care physician visits, nurse visits and laboratory tests were included where appropriate. Cost-effectiveness was expressed as the cost per patient treated to LDL-C goal over a 16-week period. RESULTS: Initiating and maintaining patients on RSV was more cost-effective than either 1) initiating and maintaining on another statin; or 2) switching from another statin to RSV 10 mg. Compared with continuing on ATV, PRA or SIM, switching to RSV would treat more patients to goal at an incremental cost of £17–117 per extra patient treated to goal. CONCLUSIONS: Initiating and maintaining patients on RSV were more cost-effective than switching from the other statins to RSV. For patients initially receiving other statins to RSV, treated more patients to goal at an increased incremental cost-utility of £17–117 per extra patient treated to goal.

A COST-EFFECTIVENESS ANALYSIS OF TAXUS™ DRUG-ELUTING STENT IN THE UK

Coronary stents (metal mesh tube) are routinely used with coronary angioplasty for the treatment of ischaemic heart disease. As many as 25% of patients need reinterventions post conventional coronary stenting due to re-narrowing of the treated artery. OBJECTIVE: The objective is to assess the total 6-month cost and the incremental cost-utility of the TAXUS™ stent (TAXUS), a paclitaxel-eluting coronary stent system, compared to conventional stents (CS). METHOD: A decision analytical model was developed to assess the 6-month cost and the incremental cost-utility of TAXUS compared to CS. The study takes a UK NHS perspective. Clinical event rates for the TAXUS and CS were taken from TAXUS II clinical trial. Utility values were sourced from the literature. Unit cost data were based on UK published sources. RESULTS: Expected costs at 6 months were £4154 for CS and £4386 for TAXUS in the treated population. Compared to CS TAXUS was cost saving in diabetic patients (CS £4546 vs. TAXUS £4342), cost neutral in small vessels (CS £4301 vs TAXUS £4342) and slightly cost additive in long lesions (CS £4306 vs TAXUS £4425). Most of the initial increase in procedure cost is offset due to savings in fewer repeat procedures. The incremental cost-utility of TAXUS compared to CS ranged from £32,381/ QALY in the total population to £4,500/ QALY in patients with small vessels and to £13,500/ QALY in patients with long lesions. In diabetic patients TAXUS was the dominant strategy. CONCLUSIONS: Most of the initial increase in procedural costs with TAXUS is offset due to savings in repeat procedures. In some high-risk patient groups such as diabetics and those with small vessels TAXUS is cost saving or cost neutral. In all patient groups, TAXUS is a cost-effective new treatment modality for patients with coronary artery disease.

LONG-TERM COST-EFFECTIVENESS OF INVASIVE STRATEGY IN PATIENT WITH UNSTABLE CORONARY ARTERY DISEASE—RESULTS FROM THE FRISC-II TRIAL

OBJECTIVES: The use of early coronary catheterization and revascularization in unstable coronary artery disease (UCAD) varies, which could have important consequences for patients as well as long-term costs. The objective of this study was to estimate the long-term cost-effectiveness and cost-utility ratios of this strategy. METHODS: We analysed data in the open randomized, clinical FRISC II invasive trial, which consisted of total 2,457 patients, with signs and symptoms of UCAD. We prospectively recorded the patients’ use of health services as well as productivity losses. Health states scores were obtained within the trial five times during the 2-years follow-up. Results were analysed in both a societal and a health care provider perspective. The uncertainty was handled using the net-benefit approach. RESULTS: There was a significant 1.74% absolute reduction in mortality in the invasive compared to the non-invasive group at two-years follow-up. The difference in mean total cost was SEK 11,386 ($1,467). This difference was not significant. The estimated cost per quality adjusted life year (QALY) gained for the invasive strategy, based on within trial results and projected life expectancy, was SEK 22,873 ($2,948). The estimated cost per life year gained was SEK 57,651 ($7,429). If costs of added life years were included the cost per quality adjusted life year was SEK 78,077 ($10,061). CONCLUSIONS: Invasive strategy in patients with unstable angina or non-ST-segment elevation myocardial infarction, was in the long-term perspective shown to be cost-effective. The results were consistent in all subgroups.

COST-EFFECTIVENESS ANALYSIS OF CITICOLINE VS CONVENTIONAL TREATMENT IN STROKE PATIENTS

OBJECTIVE: The use of early coronary catheterization and revascularization in unstable coronary artery disease (UCAD) varies, which could have important consequences for patients as well as long-term costs. The objective of this study was to estimate the long-term cost-effectiveness and cost-utility ratios of this strategy. METHODS: We analysed data in the open randomized, clinical FRISC II invasive trial, which consisted of total 2,457 patients, with signs and symptoms of UCAD. We prospectively recorded the patients’ use of health services as well as productivity losses. Health states scores were obtained within the trial five times during the 2-years follow-up. Results were analysed in both a societal and a health care provider perspective. The uncertainty was handled using the net-benefit approach. RESULTS: There was a significant 1.74% absolute reduction in mortality in the invasive compared to the non-invasive group at two-years follow-up. The difference in mean total cost was SEK 11,386 ($1,467). This difference was not significant. The estimated cost per quality adjusted life year (QALY) gained for the invasive strategy, based on within trial results and projected life expectancy, was SEK 22,873 ($2,948). The estimated cost per life year gained was SEK 57,651 ($7,429). If costs of added life years were included the cost per quality adjusted life year was SEK 78,077 ($10,061). CONCLUSIONS: Invasive strategy in patients with unstable angina or non-ST-segment elevation myocardial infarction, was in the long-term perspective shown to be cost-effective. The results were consistent in all subgroups.