coronary artery disease (CAD) undergoing percutaneous coronary intervention (PCI) were electively treated with SES or BMS (sequential control design). Baseline socio-demographic and coronary risk factors, major adverse coronary events (MACE), including death, myocardial infarction, coronary artery bypass surgery and re-PCI in target vessel, as well as disease-related direct and indirect costs were documented by standardised questionnaires completed by patients and physicians through 18 months following PCI. All results are adjusted for age, gender, household status, 3-vessel heart disease and number of stents. P-values are from tests of interaction. RESULTS: From April 2003 to June 2005, 658 patients were treated with SES (87% male, mean age 63 ± 9, 24% diabetic) and 294 patients with BMS (79% male, mean age 64 ± 10, 20% diabetic). After 18 months, 23% of SES and 27% of BMS patients with diabetes had suffered MACE in comparison to 9% of SES and 18% of BMS patients without diabetes (no significant difference in the effect of SES in the presence of diabetes, adjusted = 0.354). In diabetic patients, SES and BMS incurred total costs of EUR 14,357 and 10,909, respectively. In non-diabetic patients, SES and BMS costs totalled EUR 13,241 and 11,215, respectively (p adjusted = 0.164). In diabetic patients, the cost-effectiveness of SES vs. BMS was EUR 92,400 per patient free from MACE and in non-diabetic patients, EUR 16,163. CONCLUSIONS: In this subgroup analysis, MACE in patients with diabetes did not appear to be influenced by stent type, whereas in non-diabetic patients SES use resulted in lower MACE. SES implantation was less cost-effective in patients with diabetes than in non-diabetic patients.

A REAL WORLD COMPARISON OF COMBINED LIPID TARGET ATTAINMENT BETWEEN COMBINATION NIACIN EXTENDED-RELEASE+ANY STATIN THERAPY AND FIXED DOSE SIMVASTATIN+EZETIMIBE

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OBJECTIVES: Use of niacin extended-release with statin monotherapy (SM) for combined lipid target attainment (CLTA) of LDL-C, HDL-C, and triglycerides (TG) has been limited. The objective was to compare real-world CLTA among patients receiving niacin extended-release+any statin (NER+S) versus fixed-dose simvastatin+ezetimibe (S+E) combination therapy.

METHODS: A retrospective analysis was conducted on patients aged ≥18 years, newly initiating NER+S or S+E therapy between July 1, 2000–June 30, 2006 (index date), with health plan eligibility of at least 12 months pre- and post-index date, and at non-target HDL-C (<40 mg/dL) and TG levels (>150 mg/dL) at index date using a large integrated research claims database. CLTA, assessed at the last laboratory visit within 12 months of index date, was defined according to NCEP ATP III, ADA, and AHA Women’s guidelines where appropriate. A propensity score, controlling for differences in index date age, gender, LDL-C, HDL-C, and TG levels, was included as a covariate in a multivariate logistic regression model comparing odds of achieving CLTA between treatment groups. RESULTS: A total of 883 patients were analyzed, 445 initiating NER+S and 438 initiating S+E. NER+S patients were significantly older (54 ± 9 years vs. 51 ± 8 years; p < 0.0001), more male (81% vs. 55%; p < 0.0001), hypertensive (80% vs. 67%; p < 0.0001), and with prior cardiovascular disease (CVD) (46% vs. 17%; p < 0.0001) than S+E patients. All NER+S patients and some S+E patients (48%) were prescribed SM prior to index date. Mean baseline values for LDL-C (98 ± 36 vs. 136 ± 43 mg/dL; p < 0.0001) and HDL-C (37 ± 9 vs. 44 ± 11 mg/dL; p < 0.0001) were significantly lower among NER+S patients. Logistic regression analysis indicated 64% (OR: 1.64; 95% CI: 1.02–2.61) increased likelihood of CLTA among NER+S patients versus S+E patients.

CONCLUSIONS: Dyslipidemia patients initiating NER+S therapy were more likely to achieve CLTA than patients initiating S+E therapy in a real-world setting, thus implying a greater potential reduction in cardiovascular risk.

EFFECTIVENESS OF CLOPIDOGREL IN ADDITION TO ASPIRIN COMPARED TO ASPIRIN ALONE AFTER ACUTE CORONARY SYNDROME

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OBJECTIVES: To assess the effectiveness of clopidogrel in addition to aspirin versus aspirin alone after acute coronary syndrome (ACS) in an Australian context. METHODS: A Markov model was constructed to simulate the onset of major cardiovascular events (composite of myocardial infarction, ischemic stroke and cardiovascular death), major bleeding events and non-cardiovascular death in a representative cohort of 1000 subjects experiencing ACS. In the first year post ACS, underlying risks of events were drawn from the nationwide Australian Acute Coronary Syndromes Prospective Audit (ACACIA) registry (n = 2533). In subsequent years, risks from Australian participants of the Reduction in Atherothrombosis for Continued Health (REACH) registry (n = 2567) were used. Decision analysis compared the two interventions and follow-up was simulated for ten years. Relative risks of cardiovascular and bleeding events associated with clopidogrel were drawn from the Clopidogrel in Unstable Angina to Prevent Recurrent Events (CURE) trial, and assumed to be sustained as long as subjects remained on treatment. Uncertainty analyses were undertaken via Monte Carlo simulation. RESULTS: The modeled outcomes from the simulated follow-up of 1000 subjects in the ten year model were major CV events, major bleeding events and deaths. There were fewer CV events and deaths in the clopidogrel arm but more bleeding events than aspirin. The number needed to treat (NNT) to avoid a major CV event was 14 (9–29); to avoid a death was 33 (14–207). Overall, there were 8413 life years gained in clopidogrel compared with 8191 in aspirin alone. CONCLUSIONS: In the simulated cohort, the addition of clopidogrel to aspirin represents a highly effective strategy for the secondary prevention of death and cardiovascular events following ACS. Although there is a small increase in bleeding in the simulated cohort, the net effect remains a significant prevention of cardiovascular events, saving of lives and years of life gained.

CLINICAL EFFECTIVENESS OF BOSENTAN, EPROSTENOL, ILOPROST, SILDENAFIL AND TREPROSTINIL IN THE TREATMENT OF PULMONARY ARTERIAL HYPERTENSION—A SYSTEMATIC REVIEW

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OBJECTIVES: The aim of this systematic review (SR) is to compare efficacy and safety of bosentan, eprostenol, iloprost, sildenafil and treprostinil with conventional treatment (CT) in patients with pulmonary arterial hypertension (PAH).

METHODS: Analysis was performed according to “Polish