COST-EFFECTIVENESS OF CLOPIDOGREL IN MEXICO: A LONG TERM ANALYSIS
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OBJECTIVES: The CURE trial demonstrated that clopidogrel on top of aspirin reduces the number of cardiovascular events (CV) compared to aspirin alone by 20% in patients with unstable angina or non-ST-elevated myocardial infarction compared to aspirin alone with an acceptable 1% increase of major bleedings. Based on this result, a long-term cost-effectiveness analysis was performed in Mexico. METHODS: An expert panel identified the resource used by patients suffering from a stroke or an acute MI, according to local practices. Costs were elicited from the IMSS health care institutions. The yearly costs included the acute and follow-up costs of events, including bleedings. Indirect costs were calculated using the time of work lost. The effectiveness measure was survival. The cost-effectiveness analysis used the societal perspective and incremental cost-effectiveness ratios (ICER) were calculated using a long-term Markov model. A 3% discount rate was applied for costs and outcomes. Sensitivity analysis was performed on the discount rate and the acute events’ indirect costs were calculated using the time of work lost. The effectiveness consequences for public payer for public payer perspective in case of Betaloc ZOC use were much lower than in case of carvedilol in cardiac insufficiency as well as hypertension treatment. Annual treatment costs from public payer perspective in case of Betaloc ZOC use were much lower than in case of carvedilol in cardiac insufficiency (difference: 214.8 ($51.1E)—2696.8PLN (642E) per patient). Carvedilol was dominated by Betaloc ZOC in hypertension treatment: Betaloc ZOC has higher clinical effectiveness and generates savings (lower risk of adverse events or hospitalization) compared to carvedilol: 445.17 (106E)—4270.5PLN (1016.8E) in case of annual treatment of one patient. Sensitivity analysis showed than in most scenarios Betaloc was cheaper from public payer perspective than carvedilol. CONCLUSIONS: Betaloc ZOC in place of carvedilol lead to significant savings for public payer in Poland in cardiac insufficiency and hypertension treatment.

COST-EFFECTIVENESS OF INTENSIVE LIPID-LOWERING TREATMENT IN SECONDARY CARDIOVASCULAR PREVENTION IN SPAIN AND GERMANY
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OBJECTIVES: The Treating to New Targets (TNT) study, daily treatment with atorvastatin 80 mg (A80) reduced cardiovascular events by 22% compared with atorvastatin 10 mg (A10) in patients with coronary heart disease (CHD). The objective of this study was to evaluate the cost-effectiveness of this treatment strategy in Spain and Germany. METHODS: A lifetime model was developed to predict cardiovascular disease-related events (resuscitated cardiac arrest, hospitalized CHF, MI, stroke, revascularization, peripheral vascular disease, TIA, angina), costs, survival, and quality-adjusted life years (QALYs) for CHD patients receiving A80 versus A10 in the target countries. Treatment-specific event probabilities were estimated from the TNT trial and extrapolated to 10 years. Beyond year 10, equivalent cardiovascular risks were assumed for all patients. Post-event survival, event-specific utilities, and country-specific medical-care costs were estimated using published sources. All benefits and costs (£2005) were discounted 3.5% annually. RESULTS: In both settings, treatment with A80 is estimated to increase per-patient QALYs (8.39 vs. 8.25 in Spain, 8.19 vs. 8.05 in Germany), life years (10.99 vs. 10.86, 10.73 vs. 10.58), and costs of care (£11,468 vs. £7883, £12,546 vs. £10,237) compared with A10. Corresponding estimates of incremental cost-effectiveness of A80 versus A10 in each setting are £27,445 and £16,566 per QALY, and £26,912 and £15,809 per life year saved (LYS). In probabilistic sensitivity analysis, the likelihood that A80 is cost-effective versus A10 (<£30,000/QALY or LYS) is 59.1% and 91.3% for QALY, and 60.3% and 88.0% for LYS, respectively. CONCLUSIONS: Intensive A80 treatment is estimated to be cost-effective versus A10 in secondary cardiovascular prevention in Spain and Germany. While prior studies have demonstrated the cost-effectiveness of moderate lipid-lowering therapy versus no treatment in this patient population, the results of our analysis suggest more intensive lipid lowering with atorvastatin also can be justified on cost-effectiveness grounds versus moderate statin therapy.