RESULTS: Non-compliance is a significant problem in managing hypercholesterolaemia. Discontinuation rates for statins in normal practice average 30% after six months. This results in a significant loss of therapeutic response. In the EXCEL study (lovastatin), a 41.3% reduction in LDL cholesterol was observed in those patients who reported taking all their tablets. This compared with a 26.6% reduction in those taking 80% of their tablets. In a primary-care setting, the discontinuation rate for pravastatin was 24% after two years. The reduction in LDL cholesterol was 6% compared to 26% in those continuing treatment. This results in a change in cost-effectiveness from £376 to £1754 per % LDL reduction per year.

CONCLUSIONS: Non-compliance is an important factor when assessing a drug’s effectiveness in clinical practice. Tables comparing the cost-effectiveness of statins are often found in the medical literature, but rarely do they account for noncompliance. The present study illustrates the need to account for the impact of noncompliance in pharmacoeconomic evaluations.

AVAPROMISE: A RANDOMIZED CLINICAL TRIAL FOR INCREASING COMPLIANCE THROUGH BEHAVIORAL MODIFICATION IN ESSENTIAL HYPTERTENSION

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OBJECTIVE: Patients with hypertension are often non-compliant with their medication. A study was conducted in a usual clinical practice setting in patients with essential hypertension to improve medication compliance by modifying behavior.

METHODS: The trial was designed as a randomized, multi-center, open-label, two-arm study in patients with essential hypertension. Four thousand eight hundred sixty-four patients recruited from general practice settings were randomized to receive the angiotensin-receptor blocker irbesartan with (intervention group) or without (non-intervention group) a behavioral modification program (Avapromise), which was based on a model of change, and followed up for 12 months. Randomization to Avapromise was done by site (recruiting physicians’ office) such that all the patients within one site were randomized to the same treatment regimen to avoid contamination and to minimize investigator bias. Patients were sub-grouped based on their stage of change in the behavioral change continuum, and the intervention was tailored to address the needs of the particular sub-group. Primary efficacy measure was rate and time to discontinuation with irbesartan.

RESULTS: At the end of the study the total number of patient discontinuations was 1240 (25% of 4864). Of these, 611 (25.4%, 95% CI: 23.7–27.2) occurred in the intervention group and 629 (25.5%, 95% CI: 23.8–27.3) occurred in the non-intervention group. This resulted in a difference of −0.1% (−2.6 to 2.3) between the two groups (p = 0.94). The time to discontinuation was not different between the groups (p = 0.87). The extrapolated rate of discontinuation estimated from the Kaplan-Meier curve was also not different between the groups (intervention: 23.1%, 95% CI: 21.3–24.8; non-intervention: 23.5%, 95% CI: 21.8–25.3).

CONCLUSION: This behavioral modification intervention based on a model of change was not effective in increasing compliance rates in patients with essential hypertension in this setting.

ENOXAPARIN — A PHARMACOECONOMIC REVIEW OF ITS USE IN ACUTE CORONARY SYNDROMES

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OBJECTIVE: The development of low-molecular-weight heparins (LMWHs) as an antithrombin therapy for the management of acute coronary syndromes was prompted by the shortcomings of unfractionated heparin (UFH), the standard therapy. LMWHs, and especially the most widely used enoxaparin, offer the advantages of a stable and predictable anticoagulant response to a given dose, eliminating the need for haematologic monitoring, and much simpler administration via the subcutaneous route. However, enoxaparin should achieve improved clinical effectiveness and demonstrate economic attractiveness. The present review is an appraisal of the relative costs and benefits of enoxaparin versus UFH in acute cardiology.

METHODS: A growing number of papers have been addressing these questions during the last five years. Most of them are based on two worldwide multi-center, double-blind, randomized controlled trials, TIMI 11B and ESSENCE, involving patients with unstable angina/non-Q wave myocardial infarction. Efficiency was evaluated prospectively over the first 30 days of follow-up and retrospectively after one year of follow up, using cost-effectiveness approach. Only direct costs were measured.

RESULTS: Enoxaparin was shown to be a dominant strategy. It clearly improved efficacy and tolerability versus UFH, providing an absolute risk reduction of death, myocardial infarction and recurrent angina of 3.7% to 3.5% at more or less short term. Average cost per patient was significantly lower due to reduced frequency of diagnostic catheterization, revascularization procedures, angiography, coronary angioplasty and shorter length of hospital stay over the first 30 days. Cost reduction arose, on the long term, from less rehospitalizations and revascularizations. Moreover, those reductions were probably underestimated as indirect costs were not considered.