follow-up this may not always be the most cost-effective alternative. In fact, economic evaluations have shown that incremental cost-effectiveness ratios (ICERs) of CRT-D may be substantially higher than for comparators. A recent study demo-
strated that certain biomarkers may in fact reflect the increased susceptibility to SCD in patients with HF and this may further contribute to increase cost-effec-
tivity of the CRT-D. In the current study, the authors investigated the cost-effec-
tiveness of a hypothetical perfect biomarker for risk assessment and sub-
sequent treatment decision in implanting CRT-Ds in heart failure patients who com-
ply with the current clinical guidelines and assess the societal value (hedonism) of such outcomes. METHODS: The study uses a decision analytic model. RESULTS: The cost of a hypothetical perfect biomarker for implanting CRT-Ds in heart failure patients is a cost-effective healthcare intervention. The headroom (societal willingness to pay multiplied by the incremental quality-adjusted life years) of the hypothetical perfect biomarker ranged from £1,530 to £1,260 depending on the willingness to pay threshold. CONCLUSIONS: The use of a hypothetical perfect biomarker for implanting CRT-Ds in heart failure patients is a cost-effective healthcare intervention. The headroom (societal willingness to pay multiplied by the incremental quality-adjusted life years) of the hypothetical perfect biomarker ranged from £1,530 to £1,260 depending on the willingness to pay threshold.

Cost-Utility of Hexaminoevulinate Blue Light Cystoscopy (HAL) Assisted Transurethral Resection of the Bladder Tumour (TURB) Compared to TURB With Cold Active Diathermy (WLC) in Non-Muscle Invasive Bladder Cancer Patients with Non-Muscle Invasive Bladder Cancer (NMIBC) in Poland

PMD92

OBJECTIVES: To estimate the incremental cost-utility ratio (ICUR) for the use of a continuous infusion pump with integrated monitoring (SAP) compared with the application of multiple daily injections (MDI) in adult (>15-year-old) patients with type 1 diabetes mellitus (T1DM). METHODS: A short-term decision tree to assess outcomes of TURB and a Markov cohort model was developed in order to examine long-term outcomes. Clinical efficacy of HAL was based on a systematic review of randomized clinical trials. Data concerning course of disease and clinical outcomes were based on available observational studies, expert opinion and guidelines. Difference in utilization of resources between HAL assisted TURB and TURB with WLC alone was estimated on the basis of expert survey. Unit costs of drugs and medical procedures were based on Ministry of Health (MoH) and National Health Fund tariffs. Costs and effects were discounted at rates of 5% and 3.5%, respectively. The cost-effectiveness threshold was set to 119,577 PLN according to MoH requirements. Probabilistic sensitivity analyses (PSA) were conducted to assess the probability that HAL is cost-effective in Polish settings. RESULTS: The difference in health outcomes between HAL assisted TURB and TURB with WLC alone was 0.034 QALYs in favor of HAL. HAL assisted TURB was approximately 172 PLN more expensive than TURB with WLC. PSA indicated that HAL was cost-effective with probability of 95.9% and dominant with probability of 44.6%. CONCLUSIONS: Use of HAL to assist TURB is cost-effective in Poland when compared with TURB with WLC alone.

Cost-Utility Analysis of Continuous Infusion Pump with Integrated Monitoring Compared with Multiple Daily Injection Treatment for Patients 15-Years or Older with Type 1 Diabetes Mellitus in Colombia

PMD91

OBJECTIVES: To estimate the incremental cost-utility ratio (ICUR) for the use of

Cost-Utility Analysis of Continuous Infusion Pump with Integrated Monitoring Compared with Multiple Daily Injection Treatment

PMD90

OBJECTIVES: To assess the reduction of complications and costs with continu-
ous subcutaneous insulin infusion (CSII) versus multiple daily injections (MDI) in uncontrolled type 2 diabetic patients (T2D) in the UK. METHODS: The incidence of diabetes-related complications was calculated based on the Core Diabetes Model. The population characteristics, the reduction of HbA1c, and insulin dose were based on the Optimize study (Reznik et al., Lancet 2014) (mean age 56 years (SD 9.6); mean diabetes duration 15 years (SD 0.75)). For a baseline HbA1c of 9.0%, the reduction in the cost of drugs and medical procedures were based on Ministry of Health (MoH) and National Health Fund tariffs. Costs and effects were discounted at rates of 5% and 3.5%, respectively. The cost-effectiveness threshold was set to 119,577 PLN according to MoH requirements. Probabilistic sensitivity analyses (PSA) were conducted to assess the probability that HAL is cost-effective in Polish settings. RESULTS: The difference in health outcomes between HAL assisted TURB and TURB with WLC alone was 0.034 QALYs in favor of HAL. HAL assisted TURB was approximately 172 PLN more expensive than TURB with WLC. PSA indicated that HAL was cost-effective with probability of 95.9% and dominant with probability of 44.6%. CONCLUSIONS: Use of HAL to assist TURB is cost-effective in Poland when compared with TURB with WLC alone.
Objectives: The majority of patients who get an implantable cardioverter defibrillator (ICD) for primary prevention of sudden cardiac death (SCD) never need to receive appropriate ICD therapy. Better risk-stratifying tools are thus needed to improve the cost-effectiveness of device implantation. The purpose of this study was to assess the cost-effectiveness of using delayed non-invasive enhancement cardiac magnetic resonance (CMR) to refine patient selection for ICD therapy in primary prevention.

Methods: A Markov model was developed to assess long-term survival, quality-adjusted life years (QALYs), and lifetime costs for cohorts of patients with a reduced left ventricular ejection fraction without previous ventricular arrhythmias. Two different strategies were compared: A) implant an ICD in all patients (“ICD for all”), and B) perform CMR and implant an ICD only in patients with delayed enhancement exceeding 5% of myocardial mass (“CMR-guided ICD”). Clinical and economic inputs were derived from European representative literature. Results: The “ICD for all” strategy led to a total cost of €68,818 per QALY vs. €70,686 per QALY for the “CMR-guided ICD” strategy. Consequently, the cost-utility ratio is 77,949€ per QALY. Probabilistic sensitivity analysis showed that, assuming a willingness to pay of €50,000 per QALY, the “ICD for all” strategy would be cost-effective in 31% of simulations. The results suggest that introducing CMR ICD selection reduces life years lost due to SCD in patients allowing to use this device in those that benefit most, improving the cost-effectiveness of ICD implantation for the primary prevention of sudden cardiac death.

Conclusions: The current ICD selection criteria allows to identify individuals for which primary prevention with statins may be unnecessary. In this study it is shown that the presence of risk factors for developing diabetes interacts with the benefits of this identification. METHODS: A Markov model was used to estimate the evolution of two cohorts with elevated C-reactive protein and low LDL cholesterol: one without risk factors for developing diabetes and another with those risk factors. The progression of both cohorts was simulated assuming four alternative strategies: “no treatment”, “treat if score >100”, “treat if score >0” and “treat all”. RESULTS: For individuals without risk factors for diabetes, the “treat all” strategy is the most expensive but allows to achieve better clinical outcomes, with a cost of €24,164 vs. the “no treatment” strategy. Although associated with fewer risk factors for diabetes, the strategy “treat all” remains the most expensive, but the decrease in coronary events does not compensate the increase in diabetes incidence, whereby the “treat if score >100” and “treat if score >0 vs. no treatment” results in a gain of 0.33 QALYs. Conclusions: The latter strategy in comparison to “treat if score >100” is 36,034€. Deterministic and probabilistic sensitivity analysis show that results are robust.