bivalirudin-based strategy were used in the ACUITY and HORIZONS-AMI studies demonstrated improved clinical event rates (mortality and bleeding) when using bivalirudin compared to a heparin–GPI regimen. This analysis evaluated the economic impact of this improvement in a UK hospital setting. METHODS: A budget-impact model was developed to evaluate the impact of bivalirudin in unstable angina (UA)/non-ST-elevated myocardial infarction (NSTEMI) patients undergoing PCI. For UA/NSTEMI patients, overall average per procedure cost was £3547 with heparin plus GPI and £4822 with bivalirudin. In 100 PCI patients, bivalirudin costs were lower by £56,233 (16%). Costs per patient are estimated to be £637 per patient given the novel test would reduce false negative diagnoses of preeclampsia by 67% and false positives by 71%. Costs per patient are estimated to be £8941 with the perfusion test. A 1% increase in HDL-C equates to a 1.5% change in cardiovascular events while a 1% reduction in LDL-C equates to a 1% reduction in those events. HDL-C is statistically significantly inversely related to mortality. Higher HDL-C is associated with a decrease in the likelihood of death (β = −1.73; P = 0.04) while repeated measures that are higher further decrease that probability (β = −0.01; P = 0.02). Lower LDL-C decreases the probability of death. CONCLUSIONS: The relationship between HDL-C and all-cause mortality was quantified, replicated and validated and shown to be of greater prognostic value than LDL-C.

CARDIOVASCULAR DISORDERS – Cost Studies

PCV48 A GERMAN HOSPITAL BUDGET IMPACT MODEL COMPARING ANTICOAGULATION STRATEGIES IN PERCUTANEOUS CORONARY INTERVENTION

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OBJECTIVES: Approximately 230,000 percutaneous coronary interventions (PCIs) were performed in the Germany in 2005. PCI complications often increase resource utilization. As acute medical and follow-up costs were associated with true decrease costs. The ACUITY and HORIZONS-AMI studies demonstrated improved clinical event rates (mortality and bleeding) using bivalirudin compared to a heparin–GPI regimen. This analysis evaluated the economic impact of this improvement in a German hospital setting. As a result, additional budget-impact model was developed to evaluate the impact of bivalirudin in unstable angina (UA)/non-ST-elevated myocardial infarction (NSTEMI) patients undergoing PCI in a German hospital setting. Clinical data for the model were derived from the ACUITY trial and included 30-day event rates for major complications (major and minor bleeding as defined by trial protocol, Q-wave myocardial infarction, repeat PCI and coronary artery bypass graft (CABG)).

Economic data were derived from the medical literature, including clinical outcomes as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs.

RESULTS: For UA/NSTEMI patients, overall average per procedure cost was £3547 with heparin plus GPI and £4822 with bivalirudin. In 100 PCI patients, bivalirudin cost-savings with bivalirudin of £56,233 (16%). Costs per patient are estimated to be £637 per patient given the novel test would reduce false negative diagnoses of preeclampsia by 67% and false positives by 71%. Costs per patient are estimated to be £8941 with the perfusion test. A 1% increase in HDL-C equates to a 1.5% change in cardiovascular events while a 1% reduction in LDL-C equates to a 1% reduction in those events. HDL-C is statistically significantly inversely related to mortality. Higher HDL-C is associated with a decrease in the likelihood of death (β = −1.73; P = 0.04) while repeated measures that are higher further decrease that probability (β = −0.01; P = 0.02). Lower LDL-C decreases the probability of death. CONCLUSIONS: The relationship between HDL-C and all-cause mortality was quantified, replicated and validated and shown to be of greater prognostic value than LDL-C.

FINANCIAL IMPACT OF A NOVEL PREECLAMPSIA DIAGNOSTIC TEST VS. STANDARD CARE: A DECISION-ANALYTIC MODELING ANALYSIS FROM A GERMAN HEALTHCARE PAYERS/PERSPECTIVE

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OBJECTIVES: Pre-eclampsia, a leading cause of maternal and perinatal morbidity and mortality, is only observed after the onset of clinical symptoms. Earlier diagnosis may be possible with a new serum test using soluble fms-like tyrosine kinase-1 (sFlt-1) and placental growth factor (PIGF) biomarkers. Clinical and economic benefits may result from appropriate detection and management of subclinical cases, and from averting costs associated with incorrect diagnoses. We evaluated the financial impact of the novel test versus standard care from a German healthcare payer perspective.

METHODS: We developed a decision-analytic model of the clinical and economic impact resulting from improved sensitivity and specificity of the new test over current diagnostic practices. Acute management and follow-up costs were associated with true decrease costs. The ACUITY and HORIZONS-AMI studies demonstrated improved clinical event rates (mortality and bleeding) using bivalirudin compared to a heparin–GPI regimen. This analysis evaluated the economic impact of this improvement in a German hospital setting. As a result, additional budget-impact model was developed to evaluate the impact of bivalirudin in unstable angina (UA)/non-ST-elevated myocardial infarction (NSTEMI) patients undergoing PCI in a German hospital setting. Clinical data for the model were derived from the ACUITY trial and included 30-day event rates for major complications (major and minor bleeding as defined by trial protocol, Q-wave myocardial infarction, repeat PCI and coronary artery bypass graft (CABG)).

Economic data were derived from the medical literature, including clinical outcomes as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs. Additives, as well as ward costs (both regular and ICU/CCU) and pharmaceutical costs.

RESULTS: For UA/NSTEMI patients, overall average per procedure cost was £3547 with heparin plus GPI and £4822 with bivalirudin. In 100 PCI patients, bivalirudin use would result in 3 fewer major bleeding events (3.1%) and 11 fewer minor bleeding events (10.7%). Total hospital costs comparing 100% heparin-based strategy to 100% bivalirudin-based strategy were £341,473 and £289,025, respectively, resulting in a cost-savings with bivalirudin of £52,448 (15%). For high risk UA/NSTEMI patients the cost-savings over 100 procedures are £56,233 (16%). CONCLUSIONS: A bivalirudin-based strategy for anticoagulant use in UA/NSTEMI patients undergoing PCI is associated with favorable clinical and economic outcomes when compared with heparin plus GPI in a German hospital setting.