

the patients, as well as resource-consuming for the health care system. The ECON-APROS study has demonstrated that, besides the importance clinical-wise to treat hypertensive patients in their early stages of the disease, it is also cost-effective for the Greek health care setting

PCV22**COST EFFECTIVENESS ANALYSIS OF BOSENTAN FOR THE TREATMENT OF PULMONARY ARTERIAL HYPERTENSION IN SOUTH KOREA**

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OBJECTIVES: Pulmonary arterial hypertension (PAH) is a rare progressive and severe disease with short life expectancy. Bosentan has been shown to slow PAH progression and improve functional status, quality of life, and survival. The objective of the study is to assess cost effectiveness of bosentan for the treatment of PAH from a health care payer's perspective in South Korea. **METHODS:** A Markov model was used to estimate the expected life years, quality-adjusted life years (QALYs) and costs for a hypothetical cohort of 100 PAH patients treated for one year with bosentan compared to iloprost. The health states included in the model were WHO functional class I to IV and death. Transition probabilities were calculated based on observed transitions for bosentan and iloprost. Utility values were borrowed from an existing study, of which the utilities were calculated from estimated EuroQol health states. Costs were comprised of medication, hospitalization, and monitoring. Medication and monitoring costs were estimated from the National Health Insurance reimbursement data, with the latter based on expert opinion while hospitalization costs were estimated from a teaching hospital's claims data for 13 patients. **RESULTS:** The model predicted that the expected life years of 100 PAH patients would be 98.5 years with bosentan and 98.4 years with iloprost while the expected QALYs would be 51.1 QALYs and 33.1 QALYs, respectively. The estimated costs would be 3,395 million KRW with bosentan and 8,618 million KRW with iloprost. Treatment with bosentan compared to treatment with iloprost resulted in a greater gain in QALYs, though little gain in life years, with a significant cost saving. These findings were not substantially affected by adjustments of transition probabilities, utility values, or price of bosentan. **CONCLUSION:** Bosentan is more cost-effective or cost-saving than iloprost for the treatment of PAH in South Korea.

PCV23**HOSPITAL COSTS FOR TREATMENT OF ACUTE HEART FAILURE: ECONOMIC ANALYSIS OF THE REVIVE II STUDY**

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OBJECTIVES: Acute decompensated heart failure (AHF) is a leading cause of hospital admission. The Randomized Evaluation of Intravenous Levosimendan Efficacy (REVIVE II) trial compared patients randomly assigned to levosimendan (levo) or placebo (SOC), each in addition to local standard AHF treatments. We report the REVIVE II economic analysis. **METHODS:** REVIVE II enrolled patients (N = 600) hospitalized for AHF

remaining dyspneic at rest despite treatment with intravenous diuretics. Case report forms documented index hospital treatment (drug administration, procedures, days by care unit) as well as subsequent admissions during 90 day follow-up. These data were used to impute cost based on an econometric cost function derived from >100,000 AHF hospital billing records selected per REVIVE II inclusion criteria. **RESULTS:** Index admission mean length of stay (LOS) was shorter for the levo group compared with standard of care (SOC) (6.8 vs. 8.7 days, $p = 0.007$) although ICU/CCU days were similar (levo 2.9, SOC 3.2, $p = 0.81$). Excluding cost for levo, predicted mean (median) cost for the index admission was levo \$13,590 (9,458), SOC \$19,021 (10,692) with a difference of \$5,431 (1,234) favoring levo ($p = 0.04$). During follow-up through end of study day 90, no significant differences were observed in hospital admissions ($p = 0.67$), inpatient days ($p = 0.81$) or emergency visits ($p = 0.41$). Subset analysis excluding patients with low baseline blood pressure also showed lower cost for the index admission for the levo group. Assuming an average price for levo in countries where is currently approved, incremental cost-effectiveness of levo relative to SOC in this subset is less than \$1000 per year of life gained—a value well below accepted thresholds. **CONCLUSION:** In REVIVE II, patients treated with levo had shorter LOS and lower cost for the initial hospital admission relative to patients treated with SOC. When administered in accordance with the current label, levo is highly cost-effective relative to SOC.

PCV24**COST EFFECTIVENESS OF THE CARDIOVASCULAR PREVENTION WITH RAMIPRIL AND/OR STATINS IN HIGH RISK POPULATION IN ITALY**

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OBJECTIVES: Several drugs demonstrated the ability to reduce cardiovascular events incidence in secondary prevention. Among them we have aspirin, statins, beta-blockers and ACE-inhibitors. We performed a cost effectiveness analysis of several therapeutic options to assess their relative pharmacoeconomic performance. **METHODS:** We built a Markov model to simulate the survival rate and the cardiovascular events frequency in a high cardiovascular risk cohort formed by Italian patients who already had an acute myocardial infarction. Secondary prevention strategies considered were: C—standard therapy; R—ramipril plus standard therapy; S—simvastatin plus standard therapy; P—pravastatin plus standard therapy; R + S—ramipril and simvastatin plus standard therapy; R + P—ramipril and pravastatin plus standard therapy. Treatment efficacy values were based on the findings of the HOPE study for ramipril, the HPS study for simvastatin, the LIPID, WOSCOPS and CARE for pravastatin. Time horizon of the simulation was cohort lifetime. Direct sanitary costs were considered and valued according to current national prices, tariffs, and published literature. **RESULTS:** The average life expectancy resulted from the simulation was 12.0 in C, 12.9 in R, 12.7 in S, 13.1 in P, 13.6 in R + S and 14.0 in R + P strategies. The incremental cost effectiveness ratios (ICERs) with respect to C strategy were 1241 Euro/Life Year (LY) in R, 7610 Euro/LY in S, 7315 Euro/LY in P, 4660 Euro/LY in R + S and 5192 Euro/LY in R + P strategies. **CONCLUSION:** The simulation showed that the associations between ramipril and statins are the most effective strategies. From the economic standpoint ramipril alone is largely the most cost-effective strategy. This is mainly due to the lower cost of the drug with respect to statins.