PCV81

DRUG-ELUTING STENTS VERSUS BARE-METAL STENTS FOR ACUTE MYOCARDIAL INFARCTION: AN ECONOMIC ANALYSIS APPROACH

Sub HJ, Song H, Jang E, Lee SM, Choi J, Kim JM, Choi DH

National Evidence-based Healthcare Collaborating Agency (NECA), Seoul, South Korea.

OBJECTIVES: To assess the economic impact of using drug-eluting stents (DES) versus bare-metal stents (BMS) in patients with ST-elevation acute myocardial infarction (STEMI) in Korea from a societal perspective.

RESULTS: Incidence of revascularization after initial stenting was 5.42% and 11.79% for DES and BMS, respectively. The transition probabilities of DES-to-DES, DES-to-BMS, DES-to-CABG, DES-to-balloon were 62.8%, 1.5%, 4.1%, and 31.7%. The transition probabilities of BMS-to-DES, BMS-to-BMS, BMS-to-CABG, BMS-to-balloon were 52.8%, 7.6%, 0.0%, and 39.5%. The average costs of DES and BMS from HIRA data in 2009 value were US $11,007/person·year and US $9,771/person·year, respectively. Those from a micro-costing method were US $4966/person·year for DES HIRA data in 2009 value were US $3,675/QALY and US $3,564/QALY, respectively. Tornado diagrams and probabilistic sensitivity analyses demonstrate that covered stent and bare stent have a similar QALY and cost. The results of economic analysis show that DES is a cost-effective strategy.

PCV82

ECONOMIC EVALUATION OF THE USE OF PERFUSOR CARBON EMULSION (PCF) VS. PERIOPERATIVE BLOOD TRANSFUSION IN CARDIAC SURGERY WITH CARDIOPULMONARY BYPASS AT THE MEXICAN INSTITUTE OF SOCIAL SECURITY

Contreras I1, Chavez-Negrete A2, Contreras F3, Pinedo-Villanueva RA4, Guzman-Espinosa J5

1Instituto Mexicano del Seguro Social, Delegación Cuauhtémoc, Distrito Federal, Mexico, 2Social Security Mexican Institute, Mexico, Mexico, 3Oasis hospital, Tijuana Baja California, Mexico, 4Wessex Institute, Southampton, Hampshire, UK, 5University of Southern California, Los Angeles, CA, USA

OBJECTIVES: To estimate the clinical and economic costs and effects of 2-year treatment with high intensity atorvastatin therapy (80 mg) versus moderate to high dose simvastatin and pravastatin therapies in Spanish patients with acute coronary syndrome (ACS). METHODS: Using data from statin trials in ACS (MIAC, PROVE-IT, Ator) and priors from published statin meta-analyses, the models were constructed with published UK quality-adjusted life-years (QALYs) and compared. The cost of therapy was estimated using the UK’s National Institute for Health and Care Excellence (NICE) cost-effectiveness threshold of £30,000/QALY. RESULTS: Mean health care costs were calculated for the initial procedure, follow-up, re-interventions, adverse events, and surveillance. Procedural costs were derived from the 2009 Medicare data and device costs were obtained from the March 2009 Intercontinental Marketing Services (IMS) data. The main measure of effectiveness was quality adjusted life years (QALY) at age 65 for a 10-year horizon. QALYs were calculated for the base case scenario and for several sensitivity analyses. QALYs were calculated for the base case scenario and for several sensitivity analyses. QALYs were calculated for the base case scenario and for several sensitivity analyses. QALYs were calculated for the base case scenario and for several sensitivity analyses.

PCV83

ECONOMIC ANALYSIS OF ENDOVASCULAR STENTING FOR PERIPHERAL ARTERIAL DISEASE IN LONG LESIONS OF THE SUPERFICIAL FEMORAL ARTERY

Choi C, Hwang O, Shin S

University of Southern California, Los Angeles, CA, USA

OBJECTIVES: To evaluate the cost-effectiveness of endovascular stent treatments used in the recanalization of long lesions of the superficial femoral artery (SFA) for patients with peripheral arterial disease (PAD). METHODS: A three-state Markov model was constructed and analyzed from the societal perspective. A cycle length of six months was used to reflect the average number of days between reinterventions and the model was simulated over a lifetime time horizon with a discount rate of 3%.