

## PCV47

**COST-EFFECTIVENESS OF ENDOVASCULAR REPAIR (EVAR) COMPARED WITH OPEN SURGERY REPAIR (OSR) FOR THE TREATMENT OF ABDOMINAL AORTIC ANEURYSM (AAA) IN ITALY**

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**OBJECTIVES:** To evaluate the cost-effectiveness of endovascular repair (EVAR) compared to Open Surgery (OSR) for the treatment of Abdominal Aortic Aneurysms (AAA) from the Italian NHS' perspective. **METHODS:** A Markov model was designed to estimate the clinical and economic consequences of EVAR and OSR after one year. The base case scenario refers to the treatment of 70-year-old patients with AAA > 5.5 cm who are medically suitable to undergo either OSR or EVAR. In the model, patients move from one health state to another within 3-month cycles. Transitional probabilities of the two treatment options, including mortality and complications, as well as utilities were derived from published sources. Cost input variables like resource utilization during the procedure, treatment of post-operative complications and cost of follow-up were estimated based on data made available by a panel of Italian experts. **RESULTS:** Total direct NHS costs were €15,858 and €12,289 for EVAR and OSR, respectively. QALYs were 0.779 and 0.651 (EVAR vs OSR, respectively). Results were evaluated at a 1-year timeframe. The difference of costs due to systemic complications is favorable to EVAR (€290/patient), whilst costs for EVAR-specific complications, like conversion to OSR, endoleak, rupture or endovascular graft adjustment after migration, amount to €854/patient. The ICER for EVAR vs OSR was estimated at €27,809/QALY. Improvements in QoL, decrease of operative death and reduced post-operative complications with EVAR led to greater total QALYs vs OSR. Sensitivity analysis confirms base case scenario. **CONCLUSION:** EVAR is a valuable alternative to OSR in 70 years old patients with AAA > 5.5. Efficacious without compromising QoL and with a safety decreasing the operative death, EVAR can be considered a cost-effective procedure for AAA in Italy.

## PCV48

**MAJOR BLEED RESOURCE USE AND COSTS FOR PATIENTS HOSPITALISED WITH ACUTE CORONARY SYNDROME IN FRANCE, ITALY, AND SPAIN**

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**OBJECTIVES:** To compare the resource use and subsequent costs associated with types of major bleeds among hospitalised acute coronary syndrome (ACS) patients. **METHODS:** Retrospective chart review was undertaken in Italy, France and Spain of patients hospitalised for ACS and receiving antithrombotic, antiplatelet or fibrinolytic therapy to identify individuals with retroperitoneal (RP), intracranial (IC), gastrointestinal (GI), puncture site or excessive surgical bleeds requiring 2 or more units of blood, or decrease in Hb > 3g/dL (DHb). Use of procedures and length of stay (LOS) were extracted from the records. Publicly available country unit costs were applied to estimate the cost of these major bleeds among ACS patients.

**RESULTS:** A total of 117 patient records were included, 63.2% males, average age 74 years. Most patients were admitted for ST-segment Elevation MI. The LOS by type of bleed was 9–14 days in Spain compared to 7–13 in Italy and 5–10 in France. Only Spain identified records with bleed-related mortality. Most days were in coronary care or intensive care units. For procedures, CT scans were more common in Spain and ultrasound most common in France and Italy. Selected results show an average LOS ranges between 9–14 days for DHb (total costs €7097–9326); 9–13 days for transfusion (€8280–9105); 5–10 days for puncture site bleeds (€6182–10572). RP bleeds resulted in 5–7 days (€5761–8080) and GI bleeds in 5–13 days (€3906–9173). Overall average costs were €8341 for France, €6730 for Italy and €8027 for Spain. **CONCLUSION:** The most frequently reported major bleeds in trials (DHb, puncture sites/transfusions) are more costly than expected. Costs associated with ACS-related bleeds vary by type and these specific costs should be used in analyses.

## PCV49

**BUDGET IMPACT AND MEDICAL RESOURCES USED TO CONTROL BLEEDS IN PATIENTS HOSPITALIZED DUE TO ACUTE CORONARY SYNDROME (ACS)**

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**OBJECTIVES:** Major bleeding during Acute Coronary Syndrome (ACS) hospitalization influences clinical outcomes but its economic impact is unknown. This study estimates the costs associated with managing major bleeds in ACS patients in the hospital setting. **METHODS:** A retrospective chart review was undertaken in 5 Spanish hospitals to identify ACS patients with the following bleeding events: intracranial haemorrhage (ICH), retroperitoneal (RP) gastrointestinal (GI), puncture site or excessive surgical bleeds (PSB), blood transfusion requiring 2 or more units, or decrease in Hb > 3g/dL (DHb). Patient age, reason for admission, extended length of stay (LOS) attributed to the bleed, ward type, and resources to manage the bleed were collected. **RESULTS:** Eighty-six patients were included and analyzed (70% men), with a mean of age of 73.6 years (SD 10.9). The reasons for hospital admission were 10% non ST-segment Elevation Myocardial Infarction (NSTEMI), 68% ST-segment Elevation MI (STEMI) and 104% unstable angina (UA) (8% not classified MI). The types of bleeds were 26% GI, 14% IC, 10% F, 26% DHb and 24% (transfusion). The most common tests performed to were CT-Scan in 42%, Hb determination in 92% and red blood cell transfusions in 42% of the included patients. The mean length of stay (LOS) was 14.7 across all patients. Extended 11.6 day mean LOS due to bleed. The mean cost of all bleeding types was €8027. The mean cost by type of bleeding was €1431 (F), €6337 (IC), €9105 (transfusion), €9179 (GI) and €9326 (DHb). The cost increase was caused by the increase in hospitalization due to bleed (€7631) and secondly by transfusions (€114) and laboratory tests (€91). **CONCLUSION:** Haemorrhagic complications associated with hospitalized ACS patients showed a marked increase in the mean resources use and operating costs of this patient population in Spain.