Abstracts

PEV29 THE COST-EFFECTIVENESS OF DIAGNOSTIC STRATEGIES WITH ANGIOGRAPHY AND/OR DUPLEX SCANNING FOR AORTOILIAC AND FEMOROPOPLITEAL ARTERIAL DISEASE

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OBJECTIVES: To assess the cost-effectiveness of three diagnostic strategies for the aortoiliac (AI) and femoropopliteal (FP) arteries in patients with peripheral arterial occlusive disease (PAOD): angiography (reference), duplex scanning (DS) plus supplementary angiography if DS is inconclusive, and DS plus confirmative angiography if DS is positive. METHODS: Incremental costeffectiveness analysis from a provider perspective with the identification of a significant (positive) or insignificant (negative) diameter reduction (= the number of identified cases) as the primary effect parameter. Sensitivity (AI: 0.86-0.91; FP: 0.80-0.85) and specificity (AI: 0.97-0.99; FP: 0.96-0.98) data of DS were derived from a metaanalysis. The real costs of both diagnostic modalities were calculated from the associated personnel, material and overhead costs at our hospital for the year 2000. Costs were expressed in euro. RESULTS: The costs of DS were €67.20 and €63.28 for the AI and FP tract respectively. The cost of angiography (including a one-day admission) was €503.10. The reference strategy resulted in an unambiguous diagnosis in 90% of the AI as well as FP cases compared with 89% (AI) and 85% (FP) for the supplementary strategy. Assuming the disease prevalence in the laboratory between 70-90% however, the extra costs per identified case for the reference strategy compared with the supplementary strategy ranged from €59.000-€14.000 for the AI tract and from €8.300–€5.100 for the FP tract. CONCLUSIONS: The reference strategy is most effective for both, the AI and FP tracts. If society does not want to spend over €10,000 per identified case, then for the AI tract the supplementary strategy is the most costeffective one. If society is willing to spend €10,000 per identified case, then one should prefer the reference strategy for the FP tract.

PCV30 PROBABILISTIC SENSITIVITY ANALYSIS FOR EVALUATING COSTEFFECTIVENESS IN SECONDARY PREVENTION OF ISCHEMIC EVENTS

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OBJECTIVES: In the case of a determinist costeffectiveness analysis (CEA), uncertainty related to the parameters can be handled by a probabilistic sensitivity analysis for estimating confidence interval (CI) for incremental cost-effectiveness ratio (ICER). The study aim was

to assess uncertainty in a CEA from a French perspective of two strategies in secondary prevention of ischemic events: clopidogrel versus aspirin. METHODS: From a Markov model based on CAPRIE trial (Clopidogrel versus Aspirin in Patients at Risk of Ischemic Events 19185 patients), a CEA was run in order to assess the cost per life year saved with clopidogrel versus aspirin. We supposed that each of the parameters of the model, instead of taking a single value, was a random variable to which a distribution could be associated: beta distribution was used in the generation of transition probabilities (the parameters of distribution depend on the study characteristics from which the parameters issue) and triangular distribution of unit cost. Using a Monte-Carlo simulation, the joint distribution of mean incremental cost and mean incremental effectiveness were simulated and displayed in the cost-effectiveness plan. Ninety five percent confidence intervals were estimated using percentile method. RESULTS: The results of the Monte-Carlo simulation (10000 replications) were all clustered in the quadrant corresponding to the situation where clopidogrel is more effective and more expensive. For a hypothetical cohort of 1000 patients treated during 2 years, the estimation of the additional cost was equal to €1041 per patient CI = [952; 1,130], number of life years gained to 0,068 per patient (CI = [0,046; 0,094]). The ICER was equal to €15,907 CI = [11,655; 21,067]. CON-CLUSION: Confidence intervals estimated from the probabilistic sensitivity analysis were not too wide. This suggested that the CEA is robust and provides reliable data for decision-makers. Within its confidence interval, the ICER remains within acceptable range, and compares favourably with other therapeutic strategies.

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ACCEPTANCE AND RELIABILITY OF A COST-MEASUREMENT QUESTIONNAIRE IN CARDIAC REHABILITATION

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OBJECTIVES: Comprehensive measurement of disease related cost in an outpatient setting is a crucial task for economic assessment. In decentralized health systems like in Germany provider or third party payer data are not readily accessible suggesting a patient oriented approach. Objective of this pilot study was to develop a retrospective cost measurement instrument for cardiac rehabilitation patients which would allow reliable and-compared to prospective measurement-time and resource saving assessment of cost in studies with a medium to long-term time horizon. METHODS: A cost questionnaire was developed covering medical and non-medical resource use retrospectively over a 12-week time period after discharge from inpatient cardiac rehabilitation. One hundred and six patients were included in the pilot study (mean age 55, male 85%, myocardial infarction 51%, bypass