

four studies included the word “cost”, three “economics” and none “budget” in heading or abstract. None of the publications were thorough of cost analysis (cost-effectiveness, cost-utility, cost-minimizing or cost-of-illness analysis). Six HTAs and eight national guidelines were identified. The cost per quality adjusted life year (QALY) was indicated €80,000-€94,000. HTAs concluded reimbursement being not recommendable or no ultimate statement could be made. One pointed towards a limited use with caution. **CONCLUSIONS:** Guidelines were based on data from randomized clinical trials (RCTs). Health economics was not considered when guidelines were made. Most HTAs concluded this therapy not cost-effective or there was insufficient data for final conclusions. Licensing and reimbursement processes should be run simultaneously.

## PCN175

## ECONOMIC EVALUATION FOR FLUVESTRANT 500 MG IM VERSUS EXEMESTENE IN EGYPTIAN PATIENTS WITH METASTATIC BREAST CANCER

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**OBJECTIVES:** The main objective behind conducting this study was to evaluate the cost-effectiveness of fluvestrant 500 mg against, exemestene in the treatment of metastatic breast cancer, for the Egyptian patients, from the national fund perspective over a time horizon of 3 years. **METHODS:** Markov chain model was applied with three health states. Utility data were incorporated. Costs were that of the fund list. Results presented in of QALYs. One-dimensional sensitivity analyses were employed. **RESULTS:** During the three-year time horizon the total cumulative QALY gained for fluvestrant 500 mg was 1.58 QALY. The total cumulative QALY gained for exemestene was a 0.43 QALY. **CONCLUSIONS:** The introduction of fluvestrant 500 mg to the national fund - system was found to be cost saving based strictly from its perspective the model addresses both the health and economic implications of both drugs. The result of the study suggest that fluvestrant 500 and helping for taking the decision for resource allocation towards the cost saving treatment .

## PCN176

## ADDING BEVACIZUMAB TO SINGLE-AGENT CHEMOTHERAPY FOR THE TREATMENT OF PLATINUM-RESISTANT RECURRENT OVARIAN CANCER: A COST-EFFECTIVENESS ANALYSIS OF THE AURELIA TRIAL

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**OBJECTIVES:** To evaluate the cost-effectiveness of adding bevacizumab to single-agent chemotherapy for platinum-resistant recurrent ovarian cancer. **METHODS:** A decision-tree model was constructed to evaluate the cost-effectiveness of adding bevacizumab to standard treatment with single-agent chemotherapy (BEV + CT) as compared to treatment with single-agent chemotherapy alone. Transition probabilities were based on findings from AURELIA, an international randomized phase III clinical trial and the first to evaluate the survival benefits of adding bevacizumab to chemotherapy for women with platinum-resistant disease. Quality-adjusted life-years (QALYs), progression-free survival (PFS), and costs were modeled over a horizon of fifteen months. Assuming a U.S. public payer perspective, incremental cost-effectiveness ratios (ICERs) were evaluated as the incremental cost per QALY gained and the incremental cost per progression-free life-year saved. To evaluate the robustness of our results, we performed deterministic and probabilistic sensitivity analyses. **RESULTS:** The ICERs associated with BEV + CT were \$285,624 per QALY gained and \$151,059 per progression-free life-year saved. Varying transition probabilities, costs, and utilities across the expected distribution of each parameter resulted in 7.2% of ICER estimates falling below the commonly accepted willingness to pay (WTP) threshold of \$50,000/QALY gained; at a WTP threshold of \$100,000/QALY gained, 22% of ICER estimates were cost-effective. One-way deterministic sensitivity analysis suggests that BEV + CT would become cost-effective at a WTP threshold of \$50,000/QALY gained if the cost of treatment was reduced by 65%. **CONCLUSIONS:** Despite gains in QALYs and PFS, the addition of bevacizumab to single-agent chemotherapy for the treatment of platinum-resistant recurrent ovarian cancer would not be considered cost effective at a willingness to pay threshold of \$50,000/QALY gained or \$100,000/QALY gained. On a per-patient basis, individual expected benefits, risks, and costs associated with treatment should be taken into consideration when prescribing bevacizumab.

## PCN177

## LITERATURE REVIEW OF ECONOMIC EVALUATIONS OF SCREENING TESTS FOR BREAST CANCER

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**OBJECTIVES:** The objective of this literature review was to explore the existing evidences regarding cost-effectiveness of breast cancer screening (BCS) tests in average-risk women and in high-risk women. **METHODS:** A literature review was performed using the PICO method: Population consisted of women at average risk and at high risk for breast cancer; Intervention and Comparators were BCS tests, and Outcomes were incremental cost-effectiveness ratios (ICERs). The literature search was performed with the NHS EED filters using the electronic databases (MEDLINE, EMBASE and PubMed) from January 2005 until May 2015. **RESULTS:** The literature review allowed retrieving 1,699 studies of which 39 fulfilled the eligibility criteria. Fourteen studies were cost-effectiveness analyses, twenty-one were cost-utility analyses and four were both. Eighteen studies used a Markov model while seven studies used a decision tree. Time horizon varied from 5 years to lifetime. Main interventions compared were no screening, biennial mammography, annual mammography and annual mammography combined to MRI. For average-risk women, ICERs for biennial mammography varied between (2015US)\$4,715-\$21,747/LYG and between (2015US)\$7,548-\$107,590/QALY compared to no screening, while ICERs for annual mammography ranged from (2015US)\$24,124-\$40,266/LYG and (2015US)\$69,217/QALY. For high-risk women, ICERs for annual mam-

mography ranged from (2015US)\$7,221-\$39,251/QALY compared to no screening. Also for high-risk women, combined MRI and mammography were associated with ICERs from (2015US)\$19,288/QALY to dominant compared to mammography alone. These results include women of any age and mammography of any type. **CONCLUSIONS:** Results suggest that annual mammography is mostly cost-effective when compared to no screening. According to a \$100,000/QALY threshold, most of analyzed studies suggest that combined screening is cost-effective in high-risk women compared to mammography alone, despite a wide cost-effectiveness ratios range. Notwithstanding the high level of heterogeneity among selected studies, this review provides a comprehensive overview of the cost-effectiveness of BCS and could serve in the realization of future economic evaluations.

## PCN178

## ECONOMIC EVALUATIONS OF GLIOBLASTOMA

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**OBJECTIVES:** Glioblastoma is a most aggressive primary brain tumor. Few economic evaluations have been performed to evaluate treatments in glioblastoma. The objective of this literature review was to identify the characteristics of economic evaluations in glioblastoma and the methods used to assess their economic impact. **METHODS:** A literature search was performed using MEDLINE and EMBASE electronic databases from January 2004 until February 2014 to identify economic evaluations of glioblastoma. Titles were initially screened for relevance. Then, abstracts of potentially relevant studies were reviewed. Finally, full-text articles were obtained for studies deemed relevant according to the abstract and were analyzed in details and relevant characteristics were extracted. **RESULTS:** A total of 1,666 potentially relevant studies were identified. After screening titles and abstracts, 105 full-text articles were assessed according to the eligibility criteria and 14 studies were included. Cost-effectiveness and cost-utility analyses were performed in 86% of studies. Thirty six percent of the economic evaluations used a Markov model and fourteen percent used a decision tree. The time horizon varied from 1 year to lifetime, with 57% of studies with a time horizon of more than 5 years. A large majority of the economic evaluations adopted the perspective of the healthcare system (n=12) and two studies reported societal perspective. The largest proportion of the studies compared temozolomide to several chemotherapy used in glioblastoma (57%), followed by bevacizumab (7%), carmustine wafer (7%). Among studies that reported a cost per QALY or a cost per LYG (9 studies). Among these, 29% have an ICER of CAD\$50,000 or less, while 43% have an ICER of CAD\$100,000/(QALY, LYG) or less. **CONCLUSIONS:** Despite the high level of heterogeneity among selected studies, this review provides a comprehensive overview of the cost-effectiveness of several treatments in glioblastoma and could serve in the realization of future economic evaluations.

## PCN179

## FIXED COMBINATION NETUPITANT AND PALONOSETRON IS A COST-EFFECTIVE INTERVENTION FOR THE PREVENTION OF CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING IN THE UK

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**OBJECTIVES:** The objective was to evaluate the cost-effectiveness of an oral fixed combination netupitant and palonosetron (NEPA) compared with aprepitant and palonosetron (APPA) or palonosetron (PA) alone, to prevent chemotherapy-induced nausea and vomiting (CINV) in patients undergoing treatment with highly or moderately emetogenic chemotherapy (HEC or MEC) in the UK. **METHODS:** A systematic literature review and meta-analysis were undertaken to compare NEPA with currently recommended anti-emetics. Relative effectiveness was estimated over the acute (day 1) and overall treatment (day 1-5) phases, taking complete response (CR, no emesis no rescue medication) and complete protection (CP, CR plus no more than mild nausea) as primary efficacy outcomes. A three health-state Markov cohort model, including CP, CR and incomplete response (no CR) for HEC and MEC, was constructed. A five day time horizon and UK NHS perspective were adopted. Transition probabilities were obtained by combining the response rates of CP and CR from NEPA trials and odds ratios from the meta-analysis. Utilities of 0.90, 0.70 and 0.24 were defined for CP, CR and incomplete response, respectively. Costs included medications and management of CINV-related events and were obtained from the British National Formulary and NHS Reference Costs. The expected budgetary impact of NEPA was also evaluated. **RESULTS:** In HEC patients, the NEPA strategy was more effective than APPA (quality-adjusted life days [QALDs] of 4.263 versus 4.053; incremental emesis- and CINV-free days of +0.354 and +0.237 respectively) and was less costly (£66 versus £124), resulting in NEPA being the dominant strategy. In MEC patients, NEPA was also dominant, cumulating in an estimated 0.182 extra QALDs at an incremental cost of -£7.35 compared with PA. Introducing NEPA is estimated to provide net 5-year cumulative cost savings of £13,981,628. **CONCLUSIONS:** The results suggest NEPA is cost-effective for preventing CINV associated with HEC and MEC in the UK.

## PCN180

## COST-EFFECTIVENESS OF IDELALISIS IN COMBINATION WITH RITUXIMAB FOR THE TREATMENT OF RELAPSED/REFRACTORY CHRONIC LYMPHOCYTIC LEUKEMIA (CLL) IN PORTUGAL

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