appraisable price. CONCLUSIONS: The using appraisable plus standard antinecancer therapy was mouseable and economically justified treatment option for prevention of nausea and vomiting associated with highly and moderately emetogenic cancer chemotherapy.

PCN123 ECONOMIC EVALUATION OF FULVASTRANT 500 MG VERSUS GENERIC NON-STEROIDAL AROMATASE INHIBITORS IN PATIENTS WITH ADVANCED BREAST CANCER IN GREAT BRITAIN

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OBJECTIVES: In Norway, breast cancer represented 23% of all new cancer cases between 2004 and 2008, and was a leading cause of mortality representing 13% of all cancer deaths. The objective of this study was to perform an economic evaluation of fulvastrant 500 mg compared with anastrozole and letrozole used as second line endocrine therapy after failure of treatment of advanced breast cancer in post-menopausal women in Norway. METHODS: The economic analysis was conducted by using a simulation model estimating progression-free survival, overall survival and associated costs and utility gains over the expected lifetime of the patients. As there are no published estimates of the economic impact of these treatments, we have used the clinical evidence for the comparative effectiveness was obtained from a net-mega-analysis. The economic evaluation was conducted from a health care perspective, with costs and resource use based on published sources and expert assessment. RESULTS: The cost-effectiveness ratio of fulvastrant 500 mg versus anastrozole 1 mg was 36,000 EUR per quality-adjusted life year (QALY), with incremental costs of 9,600 EUR and incremental QALYs of 0.27. The cost-effectiveness ratio of fulvastrant 500 mg versus letrozole 2.5 mg was 62,000 EUR per QALY, with incremental costs of 21,000 EUR and incremental QALYs of 0.34. In the sensitivity analysis the results were stable for variations of key parameters, such as the time horizon, the discount rate and their relation to overall survival and the discount rate for progression-free survival and the discount rate. CONCLUSION: Given an infin- cost-effectiveness threshold of around 70,000 EUR per QALY in Norway, the results of this analysis suggest that fulvastrant 500 mg can be considered as a valuable treatment compared with alternative treatments such as anastrozole and letrozole. These findings indicate that fulvastrant 500 mg is a valuable treatment option for patients with advanced breast cancer in Norway.

PCN124 COST-EFFECTIVENESS OF THE SYSTEMATIC IDENTIFICATION AND TREATMENT OF COMORBID DEPRESSION FOR PEOPLE WITH CHRONIC DISEASES: THE EXAMPLE OF CANCER

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OBJECTIVES: Comorbid major depression occurs in approximately ten percent of people suffering from a chronic medical condition such as cancer. An individualized or col-aborative care approach can be used to systematically identify and treat comorbid major depression. However, we lack information on cost-effectiveness of overall approach as economic ap- praisals of this analysis were performed in a decision analytic model structured to reflect both the systematic identification and treatment processes. Evidence was taken from reviews of rel-evant clinical trials and from observational studies, together with data from a large detailed cost-impact study. Sensitivity and scenario analyses were undertaken to determine the subjective effects of variation in the horizon of time, in patient characteristics and alternative estimates of treatment effect. Probabilistic sensitivity analysis was also undertaken. RESULTS: Systematic depression management as compared with usual care has similar quality-adjusted life years (QALYs) at 11,765 per QALY and the probabilities of systematic management being cost-effective at thresholds of 20,000 and 30,000 per QALY were 0.996 and 1 respectively. Findings were robust to tests of variation in key model parameters. CONCLUSIONS: A combined approach to the systematic identification and treatment of comorbid major depression in cancer patients is likely to be cost-effective at widely accepted thresholds values. Systematic depression management may be a better way of generating QALYs for cancer patients than some existing medical and surgical treatments. It could potentially be applied to other chronic medical conditions.

PCN125 PET-BASED RADIOTHERAPY TREATMENT PLANNING IS HIGHLY COST EFFECTIVE COMPARED TO CT-BASED PLANNING: A MODEL-BASED EVALUATION

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OBJECTIVES: PET-based radiotherapy planning for selective lymph node irradiation is an example of the current tendency to individualize treatment in cancer. We evaluated the cost-effectiveness of individualized radiotherapy planning, compared to CT-based to CT-based radiotherapy treatment planning in non-small cell lung cancer. METHODS: Our analysis uses a previously developed decision model. The model was based on data for 200 NSCLC patients with inoperable stage I-IIIb, provided by the Netherlands Cancer Institute. Transition probabilities were based on multi-state statistical modelling and include the impact of patient and tumour features on disease progression. Resource use estimates, costs and utilities were obtained from the de-terminant of the Maastricht Clinic, the literature and relevant guidelines. Primary outcomes were the difference in life years (LY), quality adjusted life years (QALY), costs and the incremental cost-effectiveness and cost-utility ratio. RESULTS: PET-CB planning was associated with an incremental cost of €534 (95% CI: €460 – €680) for 0.43 incremental QALYs (95% CI: 0.31–0.52) and 0.33 QALYs gained (95% CI: 0.26–0.45). The base EUR cost of PET-CT versus CT based radiotherapy planning. Model outcomes were obtained from averaging the outcome for 50 simulated patients. To present uncertainty, a probabilistic sensitivity analysis was done. In scenario analyses, we explored the effect of varying the input parameters for costs and QALYs and the effect of varying the assumption on the model outcomes. A probabilistic sensitivity analysis gave a 41% prob-ability that PET-CT based planning improves health outcomes at reduced costs and a 59% probability that PET-CT based planning is more effective at slightly higher costs. CONCLUSIONS: PET-based radiotherapy planning for non-small cell lung cancer is highly cost-effective compared to CT-based planning.

PCN126 COST-EFFECTIVENESS OF SYSTEMATIC TESTING FOR LYMPH NODES IN PATIENTS NEWLY DIAGNOSED WITH COLORECTAL CANCER IN THE UNITED KINGDOM

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OBJECTIVES: The cost-effectiveness of genetic testing for Lynch Syndrome for patients newly diagnosed with colorectal cancer in the UK has not been previously estimated. Therefore, the cost-effectiveness of nine testing strategies was simula-aneously compared using a detailed and rigorous mathematical model. METHODS: In this comparative analysis, we tested on the basis of previously reported strategies included use of family history, tumour-based tests and genetic testing. The clinical pathways of thousands of individual patients diagnosed with colorectal cancer were simulated. For each person, the total costs and quality-adjusted life years (QALYs) were calculated using methodology recommend-ed by the National Institute of Health and Care Excellence (NICE). Simulated clinical pathways included use of genetic testing to identify carriers. The cost and economic assessment of colorectal, EC, colonoscopy and background costs. A proportion of people diagnosed with Lynch Syndrome were assumed to receive prophylactic hysterectomy and to undergo biomolecular colonoscopies (assumed to reduce the incidence and stage of colorectal cancer). The costs of treating patients with CRC with surgery, chem-otherapy, radiotherapy, stoma care and palliative care were captured. Similarly, the costs of treating patients with EC with chemotherapy and radiotherapy were included. RESULTS: The life expectancies of probands and relatives with Lynch Syndrome are estimated to increase by up to 1.6 years, depending on the strategy for genetic testing. All testing strategies are predicted to offer good value for money whereas, with all incremental cost-effectiveness ratios below the basic cost-effectiveness threshold of 20,000 per QALY. Universal genetic testing is predicted to offer poor value for money versus targeted genetic testing. CONCLUSIONS: Results suggest that targeted genetic testing for Lynch Syndrome for patients with newly diagnosed CRC in the UK is a good use of limited financial resources.

PCN127 COST-EFFECTIVENESS ANALYSIS OF CARISOPRODOL ENDOSCOPY IN SCREENING FOR COLORECTAL CANCER IN JAPAN

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OBJECTIVES: The PillCam Colon2 is a colon capsule endoscopy (CCE) that makes a minimally-invasive examination possible for people expected to improve survival and a significant reduction in the current detailed examination rates. The cost-effectiveness of CCE is primarily dependent on the degree of improvement in the current detailed examination rates (1 Euro and the use of colonoscopy) and the comparator was colonoscopy in Japan. The primary objective of this analysis was to evaluate the cost-effectiveness of CCE if newly introduced into the current population-based CRC screening system in Japan. METHODS: The subject of this analysis was a sequential screening system for which CCE has been incorporated (immunochemical faecal occult blood test (FOBT) → detailed exami-nation for CCE → detailed examination by colonoscopy) and the comparator is the conventional sequential screening system (FOBT → detailed examination by colonoscopy). The target population includes asymptomatic adults aged 40 years old and a lifelong simulation was conducted using a Markov model which consists of 8 stages, no poly, adenomatus poly (≤ 5mm, 6-9mm and ≥ 10mm), local-ized CRC, reginal CRC, distant CRC and death. The efficacy measures were life year and quality-adjusted life year (QALY). The analysis was conducted from the perspective of the payer and only direct medical costs were considered. RESULTS: The incremental cost-effectiveness ratio (ICER) observed when incorporating CCE into the conventional screening system was ≥5911 per QALY, ≥25,060 per QALY and ≥14,905 per QALY when assuming a 10%, a 20% and a 30% improvements in detailed examination rates (1 Euro→128 JPY). Therefore, the introduction of CCE was determined to be cost-effective if the detailed examination rate increased by 20% or more relative to current rate with CCE introduction. CONCLUSIONS: Based on the simulation, the introduction of CCE into the conventional colonoscopy-based screening system in Japan is shown to be cost-effective. The cost-effectiveness of CCE is primarily dependent on the degree of improvement in the current detailed examination rate.

PCN128 COST-EFFECTIVENESS OF FIRST-LINE TREATMENT OF ADVANCED METASTATIC NON-SMALL CELL LUNG CANCER: A SYSTEMATIC REVIEW OF ECONOMIC MODELS

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