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or $500mg. The indirect analysis did not show a statistically significant difference in OS between everolimus compared with fulvestrant.

PCN12

SMALL MOLECULE TARGETED THERAPIES FOR THE TREATMENT OF MEETASTATIC PROSTATE CARCINOMA (mPCa) : A SYSTEMATIC REVIEW AND INDIRECT COMPARISON OF SAFETY AND EFFICACY

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OBJECTIVE: Patients with mKCa and a good performance status typically receive an anti-VEGFR TKI (sunitinib or pazopanib) as initial therapy. Upon disease progression, patients may receive chemotherapy and then an anti-VEGFR TKI (sunitinib or pazopanib) as second therapy. A third anti-VEGFR TKI (e.g., sorafenib) may be considered if patients progress during second-line therapy. This systematic review examines the direct and indirect evidence for all anti-VEGFR TKIs for second-line therapy in patients with mKCa and compares the safety and efficacy of second-line therapy with these drugs.

METHODS: A systematic literature search was conducted using Medline, Embase, Lilacs, and CENTRAL. The primary endpoint was progression-free survival (PFS). A meta-analysis (MA) of the published data was performed. The results were expressed as Hazard Ratio (HR) or Risk Ratio (RR), with their corresponding 95% confidence intervals (CI 95%).

RESULTS: The final analysis included 12 trials comprising 2,054 patients with mKCa. It was evidenced studies with conventional CT plus targeted therapy including bevacizumab (Bev), sorafenib (Sor), cetuximab and iniparib. The PFS was higher in patients who received Bev plus CT compared to CT alone in previously untreated patients with mKCa (fixed effect: HR = 0.62, CI 95%: 0.51-0.75; p < 0.0001). The PFS was also higher in patients with Bev alone in previously treated patients (fixed effect: HR = 0.69, CI 95%: 0.59-0.83; p < 0.0001). Sor plus CT was available in first-line and second-line. The PFS was higher in the group with Sor versus CT alone (fixed effect: HR = 0.62, CI 95%: 0.45-0.85; p = 0.002). Sor plus CT was more active in the first-line and second-line. The PFS was higher in the group with Sor versus CT alone (fixed effect: HR = 0.69, CI 95%: 0.59-0.83; p < 0.0001). Sor alone plus CT was more active than CT alone (fixed effect: HR = 0.72, CI 95%: 0.56-0.90; p = 0.002).

CONCLUSIONS: Bev, Sor and iniparib, when associated with the conventional CT, demonstrated gains in the PFS of patients with mKCa.

PCN13

TARGETED THERAPY IN TRIPLE-NEGATIVE METASTATIC BREAST CANCER (TNBC) - A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: To perform a systematic review and meta-analysis of all randomized controlled trials comparing the efficacy of targeted therapy to conventional CT in patients with metastatic TNBC. A secondary end point was the effect of second-generation TKIs on patients' quality-of-life. All adult patients (≥18) newly diagnosed with AML between September 2011 and 2013 for docetaxel-based chemotherapy. This study aims to understand the relative clinical and economic value of these therapies. METHOD: Two pivotal clinical trials were conducted to evaluate abiraterone and enzalutamide in post-docetaxel treatment of mCRPC. Study COU-AA-301 for abiraterone and the AFFIRM trial for enzalutamide. The PCIQ (population, intervention, comparison, and outcomes) construct was employed to assess the comparability of the trials, followed by an indirect treatment comparison (ITC) using the Bucher method and a mix treatment comparison using Bayesian statistics. An economic evaluation was performed based on the ITC results. RESULTS: Several key differences were identified between the COU-AA-301 and AFFIRM trials. First, the studies used different comparators. Abiraterone plus prednisone was compared with prednisone alone, while enzalutamide was compared with placebo. Second, the endpoints PFS, PSA progression, and PSA relapse-free survival were different between trials, and thus not included in the analysis. To address the difference in comparators, the ITC was performed using data from COU-AA-301 and subjects receiving corticosteroids concurrently in the AFFIRM trial. OS was significantly improved with both abiraterone and enzalutamide (HR = 0.62, CI 95%: 0.50-0.76; p < 0.0001). The ITC analysis was performed for abiraterone versus enzalutamide using the Bucher method, and HR = 0.98 (95% CI: 0.71-1.26) using the Bayesian method. The US price for abiraterone and enzalutamide (approved in the US only), and assuming 25% of patients received therapy following docetaxel, cost savings from using abiraterone would be $10K/patient/year or $490K/year nationally. CONCLUSIONS: Differences in study design should be addressed when conducting an ITC. The evidence from this ITC shows that abiraterone and enzalutamide have similar efficacy in OS in mCRPC post chemotherapy. However, abiraterone is cost saving compared to enzalutamide in this analysis.

PCN15

DIFFERENCES IN MEDICAL COST AND SURVIVAL BETWEEN TRIAL AND NON-TRIAL PATIENTS WITH ACUTE MYELOID LEUKAEMIA – A UK POPULATION-BASED PROPENSITY ANALYSIS

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OBJECTIVES: Information about acute myeloid leukaemia (AML), including the costs of treatment and survival-estimates, are usually derived from clinical trial data. However, it is not known whether this information is generalizable to non-trial patients. This study was carried out to evaluate the differences in medical costs and survival between trial and non-trial patients with AML. The study uses the external validity of trial data to the general patient population. METHODS: The Haematological Malignancy Research Network (HMNR, www.hmnr.org) is an established population-based patient cohort that registers around 2000 newly diagnosed patients in the UK annually. The study included 622 patients with trial and 1430 non-trial patients with AML treated with induction therapy, either chemotherapy or stem cell transplantation. Survival was measured from date of diagnosis to date of death. Propensity score analysis was used to account for differences in baseline characteristics between trial and non-trial patients. RESULTS: Overall, 173 patients treated with induction intent were included, of which 106 were trial and 67 non-trial. Trial participation was associated with younger age, fewer comorbidities, better prognosis, and being treated at teaching hospitals. Before controlling for patients’ characteristics, trial patients had better survival and incurred higher medical costs (p < 0.001 for both data sets). After controlling for patients’ characteristics by carrying out propensity score analyses, these differences remained significant in both survival (median survival 28.7 vs. 8 months; p < 0.001) and medical costs (mean costs £384,497 vs. £268,648; p < 0.001). CONCLUSIONS: For AML patients treated with induction intent, significant differences were observed in treatment costs and survival according to trial status, both before and after controlling for patients’ pre-treatment characteristics. Data generated solely from clinical trials may therefore not be generalizable to non-trial patients and should be treated with some caution when used to facilitate decision-making.