NO CONCLUSIVE EVIDENCE FROM RANDOMIZED CONTROLLED TRIALS (RCTS) FOR IMPROVED SURVIVAL WITH SECOND-LINE TREATMENT OPTIONS, IN PATIENTS WITH METASTATIC HORMONE-REFRACTORY PROSTATE CANCER (MHRPC) PREVIOUSLY TREATED WITH DOCETAXEL

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OBJECTIVES: A systematic literature review identified randomized controlled trials (RCTs) reporting PFS for bevacizumab-based and doublet-chemotherapy combinations. Studies were evaluated for comparability of design and patient population. Reported PFS hazard ratios (HR) were analyzed simultaneously using a mixed treatment comparison framework. The base-case analysis compared BCG and BCP with grouped platinum-doublets (PLD) and grouped nonplatinum-doublets (NPLD). Scenario analyses explored BCP and BCG versus different combinations of doublet treatments. RESULTS: Eight identified RCTs, considered comparable in design and patient characteristics, allowed for a comparison between bevacizumab-based therapies and grouped doublet-chemotherapy combinations. The expected PFS HRs relative to PLD, for BCP, BCG, and NPLD were 0.52 (95% interval: 0.45; 0.61), 0.56 (95% interval: 0.48; 0.65), and 0.66 (95% interval: 0.57; 0.77), respectively. BCP and BCG demonstrated improved PFS compared to NPLD (HR = 0.52, 95% CI: 0.45–0.61), and BCP had a better prognosis at baseline. Patient distributions observed in the NPLD trials were generally comparable to the other two arms in terms of PFS, and therefore could be considered as the first treatment option in advanced or metastatic NSCLC.

RETROSPECTIVE DATABASE ANALYSIS OF THE EFFECT OF DOCETAXEL ON OSTEOPOROSIS IN PATIENTS WITH PROSTATE CANCER AND BONE METASTASES

6 months before first infusion of ZOL. Patients were followed until discontinuation or study completion. Fractures were categorized as vertebral, hip, or other nonvertebral fractures. Persistency was defined as the absence of a fracture occurring before ZOL, or no treatment, and to examine the benefit of long-term ZOL use in a real-world study setting. A total of 136 patients were included in this analysis. The main results were that the rate of new vertebral or hip fractures was significantly lower in the ZOL group compared to the control group (P = 0.0003). Longer persistency with ZOL was associated with a reduced fracture rate (trend test, P = 0.0179). The mortality rate was also significantly lower in ZOL patients versus patients receiving no IVBP (6.2 vs. 9.4 per 100 person-years, P = 0.0018). CONCLUSIONS: In men with bone metastases from PC, ZOL was associated with a significantly lower fracture rate and mortality compared with no IVBP. Furthermore, longer persistency with ZOL was associated with a lower fracture rate.

SYSTEMATIC REVIEW OF ENDOSCOPIC SUBMUCOSAL DISSECTION VERSUS ENDOSCOPIC MUCOSAL RESECTION FOR EARLY GASTRIC CANCER

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OBJECTIVES: Endoscopic submucosal dissection (ESD) allows en bloc resection of the entire lesion which permits higher cure rate and avoids local recurrence, and consequently, increases quality of life by minimizing the resection size compared to endoscopic mucosal resection (EMR). While ESD has been implemented in most university hospitals in Korea currently, potential complications of ESD like hemorrhage and perforation were over the therapeutic decision on the ESD for early gastric cancer patients as well as the reimbursement decision-making. The study aims to address both effectiveness and safety outcomes of ESD versus EMR in early gastric cancer by systematic review. METHODS: MEDLINE, EMBASE, Cochrane Central Register of Controlled Trials (CENTRAL), and Koreamed were searched using primary key words: “stomach neoplasm” and “endoscopic submucosal dissection” and “endoscopic mucosal resection.” To assess the quality of selected studies, the methodological approach of Scottish Intercollegiate Guidelines Network were used. Five effectiveness-relevant and three safety-relevant outcome measures were extracted. Bibliography analysis and meta-analysis for each outcome was performed using Review Manager 5.0. RESULTS: Three nonconcurrent cohort studies and nine retrospective cohort studies were identified. Meta-analyses showed significantly greater effectiveness of ESD as compared to EMR for en bloc resection (OR = 8.43, 95% CI: 2.01–35.87), complete resection (OR = 1.54, 95% CI: 1.44–1.64), and curative resection (OR = 2.56, 95% CI: 1.68–3.91), local recurrence (RR = 0.13, 95% CI: 0.04–0.40), and all-cause mortality (RR = 0.65, 95% CI: 0.08–3.58). While intraoperative bleeding (RR = 2.16, 95% CI: 1.14–4.09) and perforation risk (RR = 3.38, 95% CI: 1.95–5.55) were significantly greater for ESD, overall bleeding (RR = 1.95, 95% CI: 0.76–1.98) and longer resection time (RR = 1.55, 95% CI: 0.74–2.37) were not significantly different between ESD and EMR. CONCLUSIONS: Considering bleeding risk was not significantly different between ESD and EMR, and the perforation risk usually does not lead to life-threatening disease, the effectiveness benefit of ESD can overwhelm the overall harm compared to EMR on condition that ESD was performed by surgeons with certain experiences.

MAINTENANCE ERLOTINIB VERSUS Pemetrexed FOR THE TREATMENT OF NON-SMALL CELL LUNG CANCER: INDIRECT COMPARISON APPLYING REAL-LIFE OUTCOMES

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OBJECTIVES: Recent clinical trials have established superior efficacy of both erlotinib and pemetrexed as first-line maintenance therapies for metastatic non-small cell lung cancer (mNSCLC) over placebo. Results indicated that erlotinib improved survival for all histology types and pemetrexed improved survival in nonsquamous patients. To date, there have been no head-to-head trials directly comparing the two agents. An indirect comparison analysis was performed to examine the relative efficacy of these two treatment regimens as maintenance treatment options following platinum-based first-line therapy. METHODS: An adjusted-matched indirect analysis approach was used to compare overall survival (OS) estimates in mNSCLC patients treated with erlotinib from SATURN versus pemetrexed patients from J-MEN. Patient distributions between the two studies were similar, and therefore, a distribution of survival outcomes was derived from each of 1000 repeated random matching samples of the SATURN data, with 95% confidence intervals (CI) around the mean of the aggregate of all observed median OS survival estimates generated by ordering the outcome measures and identifying the 2.5 percentile observations. To indirectly compare treatments, the median ratio (MR) for OS was calculated to approximate the hazard ratio. RESULTS: The estimated median OS after adjusted-matching was 13.9 months (95% CI: 10.9–16.8) for erlotinib, compared with the published median OS reported for pemetrexed of 13.3 months (95% CI: 11.9–14.5). Erlotinib patients had similar OS to erlotinib-treated patients with an MR of 0.96 (0.95, 1.09). CONCLUSIONS: Erlotinib and pemetrexed are similarly efficacious in first-line maintenance NSCLC differing in other parameters than efficacy such as tolerability, administration, and patient convenience.