THE REAL-WORLD COST STUDY OF TREATING MCRC WITH BEVACIZUMAB FOLLOWED BY EGFRI IN WT KRAS PATIENTS

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Colorectal cancer is the second most frequently diagnosed malignancy after prostate cancer in men and breast cancer in women in the Czech Republic. Targeted monoclonal antibodies anti-VEGF bevacizumab and EGFR inhibitors cetuximab and panitumumab (EGFRi) are reimbursed in combination with chemotherapy or alone in metastatic colorectal cancer (mCRC). However, the high cost is a potentially limiting factor. The real-world costs and effectiveness of first line bevacizumab followed by cetuximab or panitumumab were retrospectively assessed between April 2007 and May 2017 in the comprehensive cancer centre from the perspective of healthcare payer. Direct medical costs (examinations, medication, hospitalizations) were collected since the initiation of bevacizumab and EGFRi therapy to any tumour response (RECIST criteria), and/or to death. A total of 71 WT KRAS patients (40 men (56%); median age 60.5 years) with mCRC were treated with bevacizumab in the first line therapy and cetuximab or panitumumab subsequently in the second line therapy. The treatment in both treatment lines was mostly discontinued due to disease progression (PD), in 86% patients in the first line and in 84% patients in the second line therapy. After discontinuation of the second line treatment with EGFRi four patients were treated with regorafenib in the third- or fourth-line treatment. During our follow-up period (30 months on average), 55% patients died. The mean cost to PD was EUR 32,107 (CZK 842,169) and EUR 24,510 (CZK 642,905) in bevacizumab and EGFRi treatment respectively with median PFS 9.7 and 5.0 months. The median overall survival was 27.2 months and the mean cost from sequential therapy initiation to death was EUR 63,682 (CZK 1,670,390). The reimbursement of targeted medication was the main cost driver observed in our analysis. The targeted therapy made up 77%, 86% and 76% of the costs in the first line, second line and from the initiation of sequential therapy to death respectively.