Comparison of different sequences of combination chemotherapy and bevacizumab in patients with mKRAS colorectal cancer who received 2 lines of therapy: Results of population register of 14 regions of Russia

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Introduction: Based on the results of randomized trials, bevacizumab (bev) is effective in 1st, 2nd lines of chemotherapy (CT) and beyond of progression for the entire patients (pts) population. At the same time there is no clear evidence for the effectiveness of bev in case of mKRAS pts, especially, in 2nd line of CT and beyond of progression. We have reviewed the effectiveness of different sequences of combination CT and bev in pts with mKRAS mCRC, who received 2 lines of systemic therapy in routine clinical practice.

Methods: We have collected personal data of 479 pts from 17 clinics in 14 regions of Russia who began to receive 1st line at the quarter of 2013. The criteria for inclusion were the following: presence of mutations in KRAS gene, receiving at least two lines of CT for mCRC. Four groups of pts were formed depending on the combination of bev with CT in 2 lines: CT/CT, CT → bev/CT, CT/CT → bev, CT → bev/CT → bev. Overall survival (OS) was the primary endpoint. Statistical analysis was performed in IBM SPSS statistics v.20 software package.

Results: Only 97 pts (20%) meet inclusion criteria: CT/CT – 46 (47%), CT → bev/CT → 17 (18%), CT/CT → bev – 21 (22%), CT → bev/CT → bev – 13 pts (13%). Groups were comparable for the main prognostic factors such as number of organs with metastases, presence of adjuvant CT, localization of metastasis, sex, age, removal of the primary tumor. Median follow up was 27 months (6-67). Median OS in the CT/CT group was 22, CT → bev/CT → 27, CT/CT → bev – 21 and CT → bev/CT → bev – 29 months. Results of pairwise comparisons of OS between groups are presented in the table.

Conclusion: Our retrospective data showed that combination of CT with bev is effective only in the 1st line of treatment in pts with mKRAS mCRC.