Bevacizumab and cetuximab in metastatic colorectal cancer in women and men: a retrospective multicentric study in Toscana

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Colorectal cancer (CRC) is the 3d cancer diagnosed in males (14% of tumours), after lung and prostate cancer, and the 2d among females (13%), after breast cancer. We performed a retrospective multicentric study on the use of cetuximab or bevacizumab in combination with standard chemotherapy in patients with metastatic CRC. In particular we analyzed the overall survival, the progression free survival (PSF), the partial remission, and the total remission obtained from the Onco AIFA data bank of AOUS, AUOC, AUSL7 and AUSL9 of Toscana region. Gender, which is known to mediate CRC incidence, has been included as a parameter in data analysis. 82 patients (47 men and 37 women) were enrolled from AOUS, USL7 and USL 9 for bevacizumab treatment, and 62 for cetuximab (38 men and 24 women). The data indicate that CRC occurs in women on average 5 years later than in men (the gap is decreasing by years). Either for bevacizumab and cetuximab treatment, the overall survival of females is better than that of men. Further, partial or total remission has fluctuations by age: in young women is higher than in men, while in women older than 55 years is worse than in men. PSF is higher in young men than in women. All patients received combination therapy with FOLFOX or FOLFIRI in I, II or III line. Combination with FOLFIRI II line was more effective in both women and men. In conclusion, our results support the data on efficacy of bevacizumab and cetuximab in CRC treatment and highlight gender differences in responsiveness which need to be taken into account for an appropriate personalized therapy.

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