

MMP9 but Not EGFR, MET, ERCC1, P16, and P-53 Is Associated with Response to Concomitant Radiotherapy, Cetuximab, and Weekly Cisplatin in Patients with Locally Advanced Head and Neck Cancer.

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Source

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Abstract

Concomitant administration of radiotherapy with cisplatin or radiotherapy with cetuximab appear to be the treatment of choice for patients with locally advanced head and neck cancer. In the present retrospective analysis, we investigated the predictive role of several biomarkers in an unselected cohort of patients treated with concomitant radiotherapy, weekly cisplatin, and cetuximab (CCRT). We identified 37 patients treated with this approach, of which 13 (35%) achieved a complete response and 10 (27%) achieved a partial response. Severe side effects were mainly leucopenia, dysphagia, rash, and anemia. Tumor EGFR, MET, ERCC1, and p-53 protein and/or gene expression were not associated with treatment response. In contrast, high MMP9 mRNA expression was found to be significantly associated with objective response. In conclusion, CCRT is feasible and active. MMP9 was the only biomarker tested that appears to be of predictive value in cetuximab treated patients. However, this is a hypothesis generating study and the results should not be viewed as definitive evidence until they are validated in a larger cohort.