

Alkaline phosphatase levels as a prognostic factor in metastatic colorectal cancer treated with the FOLFOX 4 regimen: a monoinstitutional retrospective study

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ABSTRACT

Aims and background. Metastatic colorectal cancer has a heterogeneous behavior, and a set of patients will have minimal response and rapid disease progression. To understand this heterogeneity, studies have evaluated biological and clinical prognostic factors. Alkaline phosphatase seems to be a key prognostic factor, so we have reviewed the outcomes of our patients with respect to alkaline phosphatase levels.

Methods and study design. Between January 2003 and December 2008, we treated with the FOLFOX 4 regimen 103 consecutive patients with metastatic colorectal cancer. Thirty-two patients had alkaline phosphatase ≥ 300 U/l.

Results. Median time to progression was 4 months for patients with high alkaline phosphatase levels and 8 months for those with low alkaline phosphatase levels. Median overall survival was 8 and 17.5 months, respectively. Only 3 patients in the high alkaline phosphatase group obtained partial response (9.4%) compared to 3 complete responses and 24 partial responses (41.5%) in low alkaline phosphatase group. Toxicity was substantially different, with more grade 3-4 neutropenia, diarrhea and oral mucositis in the high than low alkaline phosphatase group.

Conclusions. Alkaline phosphatase is an uncomplicated and potent prognostic factor. Patients with high alkaline phosphatase levels had a poor prognosis. Free full text available at www.tumorionline.it

Key words: alkaline phosphatase, colorectal cancer, prognostic factor.

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