

COLORECTAL CANCER CHEMOTHERAPY

The addition of an anti-EGFR antibody to chemotherapy and anti-VEGF antibody-based regimens unexpectedly reduces progression-free survival and quality of life for patients with metastatic colorectal cancer compared with standard regimens. The reason for these findings is unclear; however, the inferior results do not seem to be caused by toxicity. Cornelis Punt of the research group believes negative interaction between the two antibodies could provide an explanation.

First-line treatment for metastatic colorectal cancer involves administration of chemotherapy plus an anti-VEGF antibody. Findings from preclinical studies and a phase II study suggested that synergistic effects could be achieved by addition of an anti-EGFR antibody to this regimen. These reports prompted the initiation of a multicenter, open-label, randomized, phase III trial in The Netherlands to study whether addition of an anti-EGFR antibody to a conventional regimen improves progression-free survival for patients with colorectal cancer.

The researchers randomly allocated 755 patients with previously untreated, metastatic colorectal cancer to receive a standard regimen, or the standard regimen plus the anti-EGFR antibody, cetuximab. The median progression-free survival for patients who received standard therapy was 10.7 months compared with 9.4 months for patients who received standard therapy plus cetuximab. Quality of life was reduced in patients who received cetuximab, and these patients had an increased number of serious adverse events.

These findings highlight the necessity of randomized, phase III trials to evaluate new therapies. The researchers plan to investigate whether the two antibodies negatively interact by using preclinical models: "...without more data, patients should not be treated with a combination of anti-VEGF plus anti-EGFR-directed therapies," Punt explains.

Susan J. Allison

Original article Tol, J. *et al.* Chemotherapy, bevacizumab, and cetuximab in metastatic colorectal cancer. *N. Engl. J. Med.* 360, 563–572 (2009).