Outcome according to metastatic site in patients with KRAS wt tumors: analysis from the CRYSTAL and OPUS studies


Background
The randomized phase II CRYSTAL study demonstrated that the addition of cetuximab to FOLFIRI was more promising in terms of tumor response and R0 resection rates than FOLFIRI alone in patients with wild-type (wt) or metastatic colorectal cancer (mCRC).

The randomized phase II OPUS study demonstrated that the addition of cetuximab to FOLFOX4 was more promising in terms of tumor response and R0 resection rates than FOLFOX4 alone in patients with wild-type LLD (limited liver disease) mCRC.

Both studies showed that the addition of cetuximab to chemotherapy was associated with an improvement in overall survival (OS), progression-free survival (PFS) and response in patients with wt tumors randomized to FOLFIRI + cetuximab vs FOLFIRI alone and FOLFOX4 + cetuximab vs FOLFOX4 alone.

Study objectives
The aim of this international study was to investigate the effects of chemotherapy + cetuximab according to whether they had LLD or non-LLD at study entry.

Methods
Patients were randomly assigned to receive either FOLFIRI + cetuximab or FOLFOX4 + cetuximab in the CRYSTAL study and OPUS study, respectively.

Results
For patients with wt tumors who were randomized to FOLFIRI + cetuximab vs FOLFIRI alone and FOLFOX4 + cetuximab vs FOLFOX4 alone, response was significantly higher in patients with wt tumors in both treatment groups of the CRYSTAL study and OPUS study, respectively. Patients were given this treatment in the CRYSTAL and OPUS studies, respectively. No significant difference was observed in response in the chemotherapy alone arms of the CRYSTAL and OPUS studies.

For patients with wt tumors who were randomized to FOLFIRI + cetuximab vs FOLFIRI alone and FOLFOX4 + cetuximab vs FOLFOX4 alone, response was significantly higher in patients with wt tumors who were randomized to FOLFIRI + cetuximab vs FOLFIRI alone and FOLFOX4 + cetuximab vs FOLFOX4 alone, respectively. Patients with wt tumors in both the CRYSTAL and OPUS studies had a higher overall survival rate compared with chemotherapy alone arms of the CRYSTAL and OPUS studies.

Conclusion
The addition of cetuximab to chemotherapy in patients with wt tumors was associated with a survival benefit compared with chemotherapy alone.

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