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There was no significant difference in overall survival between the cetuximab plus irinotecan (n=648) and the irinotecan alone (n=650) study groups (10.7 months vs 10.0 months); however, 46.9% of patients in the irinotecan only group received cetuximab after completing their assigned study regimen, and 87.2% of those who received post-study cetuximab received it in combination with irinotecan. Treatment with cetuximab plus irinotecan significantly improved progression-free survival (log rank P ≤0.0001), response rate (P <0.0001) and quality of life (P=0.047) compared with irinotecan alone.

The authors conclude that the addition of cetuximab to irinotecan does not improve overall survival in irinotecan-naive patients with refractory mCRC, but they note that the use of post-study cetuximab might have reduced any survival difference between the two study groups. The improvements in other parameters, however, support the inclusion of cetuximab in the management of patients with mCRC.

Original article Sobrero AF *et al.* (2008) EPIC: phase III trial of cetuximab plus irinotecan after fluoropyrimidine and oxaliplatin failure in patients with metastatic colorectal cancer. *J Clin Oncol* **26**: 2311–2319

Weekly adjuvant paclitaxel improves survival after standard chemotherapy in breast cancer

Adding adjuvant taxane therapy to an anthracycline-containing chemotherapy regimen has been shown to reduce the risks of disease recurrence and death in women with operable breast cancer. Sparano and co-workers investigated the optimum adjuvant taxane agent and administration schedule in this setting and found that weekly adjuvant paclitaxel therapy after doxorubicin and cyclophosphamide chemotherapy improves both disease-free and overall survival in women with breast cancer.

This study enrolled 4,950 women with operable, histologically confirmed axillary-lymph-node-positive or high-risk, axillary-lymph-node-negative breast cancer. All participants were assigned to receive doxorubicin (60 mg/m²) and cyclophosphamide (600 mg/m²) once every 3 weeks for 4 cycles and were randomly assigned to receive weekly or 3-weekly paclitaxel (80 mg/m² for 12 doses

or 175 mg/m² for 4 doses, respectively) or docetaxel (35 mg/m² for 12 doses or 100 mg/m² for 4 doses, respectively).

Patients who received weekly paclitaxel had significantly better disease-free and overall survival than those who received the current standard therapy of 3-weekly paclitaxel (hazard ratio [HR] 1.27, P=0.006 and HR 1.32, P=0.01, respectively). The survival benefit conferred by weekly paclitaxel was maintained in patients with HER2-negative disease, regardless of hormone-receptor status. Docetaxel administered once every 3 weeks improved disease-free survival, but not overall survival, compared with 3-weekly paclitaxel (HR 1.23, P = 0.02 and HR 1.13, P = 0.25, respectively) but did not significantly improve either survival outcome compared with standard therapy when administered weekly. The weekly paclitaxel group had a significantly higher incidence of moderate to severe neuropathy than any other treatment group (P < 0.001 for all comparisons).

Original article Sparano JA *et al.* (2008) Weekly paclitaxel in the adjuvant treatment of breast cancer. *N Engl J Med* **358:** 1663–1671

Prostate stem cell antigen is associated with diffuse-type gastric cancer

The intestinal type of gastric cancer is known to be induced by *Helicobacter pylori* infection, yet the causes of the diffuse type of the disease are less well understood. A Japanese genomewide association study of 90,000 single nucleotide polymorphisms (SNPs) has now found an SNP on the prostate stem cell antigen gene (*PSCA*) that might predispose individuals to diffuse-type gastric cancer.

A two-stage scan of the Japanese SNP database initially identified *PSCA* as potentially associated with diffuse-type gastric cancer. After resequencing the gene, saturation genotyping (on 749 patients with gastric cancer and 750 healthy controls) found several statistically significant SNPs, including a missense SNP at the presumed translation initiation codon rs2294008 (odds ratio 1.58; $P=6.3\times10^{-9}$). Importantly, the high-risk allele, T, was more significantly associated with the diffuse type of gastric cancer than the intestinal type (odds ratio in dominant model 4.18; $P=1.5\times10^{-17}$).