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## GLOSSARY SEER PROGRAM

Surveillance, Epidemiology, and End Results Program

## Colorectal cancer survival among European and US patients

Colorectal cancer survival rates are markedly lower in Europe than in the US. Ciccolallo *et al.* have explored the reasons behind this variation using population-based registry data.

Ten European cancer registries provided details of 2,492 consecutive cases of primary invasive adenocarcinoma of the large bowel diagnosed in 1990–1991. Data on a further 11,191 cases were extracted from the SEER database in the US. In addition to details of surgical treatment, the information included disease stage and number of examined lymph nodes as a determinant of staging accuracy.

As expected, 3-year relative survival was significantly higher in the US (69%) than in Europe (57%). In all European registries except Modena and Eindhoven, the crude relative excess risk of death was significant, ranging from 1.26 to 2.21. Patients in the US were more likely to be diagnosed with localized disease and to undergo surgical resection than their European counterparts (54% vs 48% and 92% vs 85%, respectively). In addition, examination of 12 or more lymph nodes was more common in the US. It should be noted that data from the individual European registries varied widely; the rates of localized disease among patients from the Dutch registries, for example, were higher than those in the US.

The study highlights the differences in the diagnosis and treatment of colorectal cancer in Europe and the US, and indicates that differences in the stage at diagnosis are largely responsible for the variation in survival rates between these two populations.

**Original article** Ciccolallo L *et al.* (2005) Survival differences between European and US patients with colorectal cancer: role of stage at diagnosis and surgery. *Gut* **54:** 268–273

## Adjuvant CMF in breast cancer: 30 years' experience

Bonadonna and colleagues have recently reported on their long-term experience of using cyclophosphamide, methotrexate and 5-fluorouracil (CMF) as adjuvant treatment in women with breast cancer. They show that the 'moderate but worthwhile' benefits of this

therapy are durable and are not associated with detrimental effects.

Starting in 1973, the investigators carried out three clinical trials and one observational study at the Istituto Nazionale Tumori in Milan, Italy. All the studies included women with unilateral breast cancer who underwent radical mastectomy or conservative surgery and full axillary clearance. Patients received either 6 or 12 cycles of adjuvant CMF or no further treatment after surgery.

After a median follow-up of 28.5 years, the first randomized trial showed that overall survival and relapse-free survival were superior in women who received CMF therapy compared with those who did not, and that the major effect of therapy was a reduced incidence of distant metastases. Further analysis of these data and of the subsequent trials showed that 6 cycles of CMF was equally as effective as 12 cycles, and that the risk of relapse was also reduced in women with node-negative and estrogen receptor-negative tumors.

Acknowledging the role of new drugs, such as anthracyclines and taxanes, Bonadonna *et al.* conclude that the CMF regimen has added considerably to breast cancer treatment and is beneficial over the long term.

**Original article** Bonadonna G *et al.* (2005) 30 years' follow up of randomised studies of adjuvant CMF in operable breast cancer: cohort study. *BMJ* [doi: 10.1136/bmj.38314.622095.8F]

## Reduced breast cancer mortality in Copenhagen screening program

Responding to the debate about the benefits of mammography screening, Olsen and colleagues have evaluated a mammography screening service in Copenhagen, Denmark. The results showed that breast cancer mortality fell by a quarter during the 10-year period studied, and by more than a third in women who underwent screening.

Women aged 50–69 years were invited to screening at 2-year intervals and were followed up until death, emigration or the end of the study period in 2001. Over 30,000 women (71% of the target population) participated in screening after the first round of invitations; the number of participants was slightly lower