

Cancers were divided into three classes on the basis of observed hybridization patterns: those with entirely normal *ERG* loci ($n=311$); those with rearranged *ERG* exhibiting both 3' and 5' *ERG* sequences ($n=41$; split *ERG* signal [Esplit]); and those exhibiting 3' *ERG* sequences, but with no evidence of 5' *ERG* sequences ($n=93$; deleted 5' *ERG* signal [Edel]). Rehybridization and reverse transcription polymerase chain reaction analyses confirmed that Esplit and Edel alterations corresponded to 5'-*TMPRSS2-ERG-3'* fusions as they have previously been reported in the literature. *ERG* alterations were significantly associated with baseline Gleason score, clinical stage and prostate-specific antigen level, but not with age.

Multivariate analysis revealed Edel alterations to be independent predictors of poor cause-specific and overall survival (hazard ratios 1.72 and 1.43, respectively; comparison with normal *ERG* cancers); by contrast, Esplit alterations did not predict survival. Most of the observed difference in survival was attributable to the effects of 3' *ERG* copy number, with tumors that exhibited two or more 3' *ERG* signals (i.e. duplication of *TMPRSS2-ERG* fusion) being associated with extremely poor cause-specific and overall survival (hazard ratios 2.66 and 1.84, respectively).

Original article Attard G *et al.* (2007) Duplication of the fusion of *TMPRSS2* to *ERG* sequences identifies fatal human prostate cancer. *Oncogene* [doi:10.1038/sj.onc.1210640]

Can a healthy diet reduce the risk of breast cancer recurrence?

Although the role of a healthy diet in the prevention of cancer has been much discussed, clinical trial data do not support an association between a diet high in fruit and vegetables and a reduced risk of cancer. Supporting previous findings, in a multi-institutional randomized controlled trial Pierce *et al.* have demonstrated that a major increase in the consumption of fruit, vegetables and fiber and a decrease in dietary fat intake does not reduce the risk of recurrent or new primary breast cancer in women previously treated for this disease.

In total, 3,088 women (mean age 53 years) were randomized to either a dietary-intervention group ($n=1,537$) or a control group ($n=1,551$). The major intervention was intensive telephone counseling, which was supplemented by cooking classes and by newsletters promoting high daily targets for the intake of fruit and vegetables.

Patients in the control group received information on the '5-a-day' dietary guidelines. The intervention group achieved—and maintained over a 4-year period—markedly increased intakes of vegetables (+65%), fruit (+25%), and fiber (+30%), and decreased intakes of energy from fat (−13%). Over a mean follow-up of 7.3 years, the incidences of invasive breast cancer in the two groups were comparable (adjusted hazard ratio 0.96, 95% CI 0.80–1.14; $P=0.63$). Furthermore, no significant difference in overall mortality was noted between the groups (adjusted hazard ratio 0.91, 95% CI 0.72–1.15; $P=0.43$).

Original article Pierce JP *et al.* (2007) Influence of a diet very high in vegetables, fruit, and fiber and low in fat on prognosis following treatment for breast cancer: the Women's Healthy Eating and Living (WHEL) randomized trial. *JAMA* 298: 289–298

A novel treatment regimen for poor-prognosis or relapsed germ-cell tumors

The optimum treatment regimen for patients with untreated poor-prognosis or relapsed germ-cell tumors (GCT) is currently a matter of some debate. In a recent paper, researchers from St Bartholomew's Hospital, London, UK, describe a novel intensive protocol that is highly active in GCT.

Between September 1997 and June 2005, 27 patients with untreated poor-prognosis GCT, and 35 patients with relapsed GCT following conventional platinum-based therapy, were enrolled in a phase II trial of a novel intensive regimen. The cisplatin-based protocol—GAMEC—incorporated dactinomycin, etoposide and high-dose methotrexate, administered every 14 days. Following GAMEC administration and appropriate surgery, 74% of the previously untreated group and 51% of the previously treated group were progression-free at a median follow-up of 2.5 years. Furthermore, one patient in the previously untreated group and four patients in the previously treated group were salvaged by additional therapy. Unfortunately, the toxicity associated with the GAMEC regimen was considerable, with many cycles of therapy being complicated by cases of febrile neutropenia, approximately half of which required platelet transfusion. Overall, there were five treatment-related deaths—four owing to sepsis and one to intra-abdominal hemorrhage from choriocarcinoma. In the previously treated group, methotrexate