

prostatectomy, significantly increased risks of death from prostate cancer at 10 years were seen in patients who underwent radiotherapy (hazard ratio [HR] 2.3, 95% CI 1.2–4.3;  $P < 0.05$ ), hormone therapy (HR 4.4, 95% CI 2.2–8.8;  $P < 0.001$ ) or watchful waiting (HR 2.0, 95% CI 1.1–3.8;  $P < 0.05$ ). The long-term cancer-specific survival benefit associated with surgery was even more apparent in those patients younger than 70 years old and in those with poorly differentiated tumors.

**Original article** Merglen A *et al.* (2007) Short- and long-term mortality with localized prostate cancer. *Arch Intern Med* 167: 1944–1950

### Abnormal p53 expression is a prognostic factor in locally advanced prostate cancer

Mutations of the *p53* gene and nuclear accumulation of p53 protein are associated with aggressive phenotypes in various human cancers, including prostate cancer. A recent study by Che *et al.* has evaluated the prognostic value of p53 expression in patients with locally advanced prostate cancer who received radiotherapy together with long-term or short-term androgen deprivation.

This study was based on data from the phase III randomized trial RTOG 9202. Sufficient tumor tissue for p53 analysis was available for 777 patients. In total, 168 (21.6%) patients were considered to have abnormal p53 expression, which was defined as  $\geq 20\%$  of cells with positive p53 nuclear staining. Multivariate analysis adjusting for Gleason score, clinical stage, prostate-specific antigen and treatment showed that abnormal p53 expression was significantly associated with cause-specific mortality (hazard ratio [HR] 1.89;  $P = 0.014$ ) and distant metastasis (HR 1.72;  $P = 0.013$ ), but not with overall mortality. In patients who received short-term androgen deprivation and radiotherapy, abnormal p53 expression significantly correlated with cause-specific mortality (HR 2.43;  $P = 0.0044$ ). Notably, in the subgroup of patients with abnormal p53 expression, the treatment regimen comprising long-term androgen deprivation and radiotherapy was significantly correlated with reduced cause-specific mortality (HR 3.81;  $P = 0.0087$ ).

This study showed that abnormal p53 expression is a strong independent prognostic factor for patients with prostate cancer who undergo short-term androgen deprivation and radiotherapy.

**Original article** Che M *et al.* (2007) Prognostic value of abnormal p53 expression in locally advanced prostate cancer treated with androgen deprivation and radiotherapy: a study based on RTOG 9202. *Int J Radiat Oncol Biol Phys* 69: 1117–1123

### Preoperative radiotherapy reduces risk of local recurrence after total mesorectal excision

Total mesorectal excision (TME) involving resection of the fatty tissue around the rectum is a successful treatment for colorectal cancer. Interim results of a large, prospective, randomized, multicenter trial, initiated by the Dutch Colorectal Cancer Group to investigate the efficacy of short term radiotherapy before TME, showed a reduced risk of local recurrence in irradiated patients 2 years after surgery.

Peeters *et al.* describe further results of this trial, in which 1,861 patients with resectable rectal cancer received TME preceded by radiotherapy or TME alone and were followed up for a median of 6.1 years. Radiotherapy significantly reduced the risk of local recurrence in patients who had nodal involvement, lesions 5–10 cm from the anal verge, or uninvolved circumferential resection margins. In total, 5.6% of the patients who received radiotherapy plus TME suffered a local recurrence, compared with 10.9% of patients who were treated by TME alone. At 5 years' follow-up, overall survival was 64.2% in those who received radiotherapy plus TME and 63.5% in those who received TME only.

The authors conclude that the beneficial effect of short-term radiotherapy before TME persists over time. They note, however, that the reduction in risk of local recurrence does not affect survival, which is mainly determined by distant metastases. They recommend that future treatment efforts should be directed towards preventing systemic disease.

**Original article** Peeters KCMJ *et al.* (2007) The TME trial after a median follow-up of 6 years increased local control but no survival benefit in irradiated patients with resectable rectal carcinoma. *Ann Surg* 246: 693–701