carried out a randomized trial to compare the long-term results of treatment with concomitant postoperative radiochemotherapy with mitomycin C and bleomycin (CRT), with those of postoperative radiotherapy only (RT).

The researchers randomized 114 patients with squamous-cell head and neck cancer to either RT ($n=55$) or CRT ($n=59$). Median follow-up was 76 months. At 5 years, locoregional control and disease-free survival were significantly increased in the CRT arm compared with the RT arm ($P=0.026$ and $P=0.035$, respectively). Although not statistically significant, a marked increase in overall survival was also noted in the CRT treatment group compared with the RT treatment group (55% versus 37%; $P=0.091$). In addition, the probability of developing a second primary malignancy within 5 years of treatment was significantly higher in the RT group than in the CRT group (34% versus 8%; $P=0.023$). The probability of grade III or higher late toxicity did not differ significantly between the treatment groups. Notably, both groups showed a high incidence of post-treatment hypothyroidism.

Locoregional failure is the main pattern of failure documented in patients who have undergone surgical treatment for squamous-cell head and neck carcinoma. The results of this study suggest that postoperative CRT might improve outcome in this patient population.

Original article Zakotnik B *et al.* (2007) Patterns of failure in patients with locally advanced head and neck cancer treated postoperatively with irradiation or concomitant irradiation with mitomycin C and bleomycin. *Int J Radiat Oncol Biol Phys* **67:** 685–690

High cisplatin dose increases risk of metabolic syndrome in survivors of testicular cancer

Although advances in the treatment of testicular cancer have markedly increased life expectancy, a number of reports have indicated an increased risk of cardiovascular disease in survivors, possibly mediated through the metabolic syndrome. Haugnes *et al.* examined the prevalence of metabolic syndrome in a national follow-up study involving 1,135 survivors of testicular cancer. Median follow-up was 11.1 years.

Participants were classified into the following groups on the basis of treatment regimen: surgery ($n=225$); radiotherapy ($n=446$); chemotherapy with a cumulative cisplatin dose of ≤850 mg ($n=376$); and chemotherapy with a cumulative cisplatin dose of >850 mg ($n=88$). A control cohort of 1,150 men was recruited from the Norwegian population-based Tromsø Study. Metabolic syndrome was defined, in accordance with a modified US National Cholesterol Education Program definition, as the presence of two or more of the following components: obesity; hypertension; hypercholesterolemia; or diabetes.

Metabolic syndrome was documented in 40% of the patient population. The age-adjusted prevalence of metabolic syndrome was markedly higher in the two chemotherapy groups than in the surgery group (odds ratios: 1.48 for cisplatin ≤850 mg and 2.76 for cisplatin >850 mg). Compared with the control cohort, the age-adjusted prevalence of metabolic syndrome was not increased in the total patient population. By contrast, subgroup analysis revealed an odds ratio of 2.1 for metabolic syndrome in the cisplatin >850 mg group compared with the control cohort. On the basis of these results, the authors suggest that clinicians should consider screening cisplatin-treated survivors of testicular cancer for metabolic syndrome.

Original article Haugnes HS *et al.* (2007) Components of the metabolic syndrome in long-term survivors of testicular cancer. *Ann Oncol* **18:** 241–248

Tubedown expression is a novel independent prognostic factor for neuroblastoma

Neuroblastoma is one of the most common solid pediatric tumors, accounting for 15% of cancer deaths in children. A range of prognostic factors have been used to classify these tumors as low-risk, intermediate-risk, or high-risk; however, further refinement and validation of these risk classifications are required. A recent study by Martin *et al.* showed that expression of Tubedown (also known as NMDA receptor-regulated protein 1), which is transiently expressed in various tissues during embryogenesis, correlated with the differentiation status and aggressiveness of neuroblastic tumors.

The authors showed that stage I and II neuroblastoma had lower levels of Tubedown immunostaining than stage III and IV tumors ($P=6.8\times10^{-14}$), while the more differentiated ganglioneuroblastomas and ganglioneuromas stained weakly for Tubedown. Tumors with