

The original study reported the results of 35 patients. Two additional trials of adoptive cell therapy with autologous TILs in patients with metastatic melanoma were carried out. Patients received either 2 Gy or 12 Gy radiotherapy ( $n=25$  for both) and lymphocyte-depleting chemotherapy before cell transfer. The primary outcome measures were objective response rate and survival.

Objective response rates when 2 Gy or 12 Gy radiotherapy were added were 52% and 72%, respectively. All visceral sites, including the brain, showed antitumor responses. In 93 patients, 1 treatment-related death occurred. Serum levels of IL-7 and IL-15 increased after host lymphocyte depletion. Objective response rates correlated with the telomere length of the transferred cells.

The authors concluded that in patients with metastatic melanoma that is refractory to standard therapies, host lymphocyte depletion followed by autologous TIL transfer results in objective response rates of approximately 50–70%.

**Original article** Dudley ME *et al.* (2008) Adoptive cell therapy for patients with metastatic melanoma: evaluation of intensive myeloablative chemoradiation preparative regimens. *J Clin Oncol* 26: 5233–5239

## MRL can accurately detect nodal metastases in patients with prostate cancer

Diagnostic pelvic lymph-node dissection (PLND) is the gold standard for detection of nodal metastases in patients with prostate cancer. Introduction of the lymph-node-specific intravenous contrast agent, ferumoxtran-10, has increased the potential accuracy of CT and MRI for detecting metastases. Heesakkers and colleagues carried out a prospective, multicohort study to compare the diagnostic accuracy of multidetector CT (MDCT) with that of magnetic resonance lymphangiography (MRL), and to investigate whether a negative MRL result can preclude the need for PLND.

A total of 375 patients with prostate cancer who had an intermediate or high risk of lymph-node metastases were enrolled in the study. In relation to the detection of lymph-node metastases, the sensitivity of MDCT and MRL were 34% and 82%, respectively. Specificity was 97% for MDCT compared with 93% for

MRL. The negative predictive values for MDCT and MRL were 88% and 96%, respectively, and positive predictive values were 66% and 69%, respectively. A total of 61 patients had lymph-node metastases, and in 50 patients these metastases were detected by MRL. In at least 30% of patients with lymph-node metastases, positive nodes were detected only by MRL, as they were outside the routine PLND area.

The authors conclude that MRL has higher sensitivity than MDCT to detect potential lymph-node metastases in patients with prostate cancer. In patients with negative MRL findings, the probability of lymph-node metastases is low enough to preclude PLND.

**Original article** Heesakkers RA *et al.* (2008) MRI with a lymph-node-specific contrast agent as an alternative to CT scan and lymph-node dissection in patients with prostate cancer: a prospective multicohort study. *Lancet Oncol* 9: 850–856

## High-dose cytarabine benefits patients with acute myeloid leukemia and RAS mutations

RAS mutations occur in 12–27% of patients with primary acute myeloid leukemia (AML) and *in vitro* data suggest that these mutations sensitize leukemic cells to cytarabine. Neubauer *et al.* assessed the role of RAS mutations in response to cytarabine *in vivo*.

The authors retrospectively analyzed data from 185 patients with primary AML who were enrolled in the CALGB 8525 trial and had received various doses of cytarabine after achieving complete remission. RAS mutations were detected in 34 patients. The 10-year cumulative incidences of relapse for patients with and without mutations were statistically similar (65% and 73%, respectively). Patients who harbored RAS mutations and received high-dose cytarabine had significantly lower relapse rates than patients with such mutations who received low-dose cytarabine (45% versus 100%, respectively;  $P<0.001$ ). Relapse rates for patients without RAS mutations were not significantly different with high-dose and low-dose cytarabine (68% and 80%, respectively).

Multivariable analysis, adjusted for cytogenetic findings and interactions between RAS status and cytarabine doses, showed that patients with AML and RAS mutations treated with high-dose cytarabine had a reduced risk of