genes plays a role in cancer invasion and metastasis. The authors propose that the methylation inhibition of P-cadherin in breast cancer might be a novel therapeutic target that provides a means of silencing P-cadherin expression and blocks tumor progression into aggressive disease stage.

Carol Lovegrove

Original article Paredes J *et al.* (2005) P-cadherin overexpression is an indicator of clinical outcome in invasive breast carcinoma and is associated with *CDH3* promoter hypomethylation. *Clin Cancer Res* **11:** 5869–5877

Tumor-specific oncopeptide immunization associated with longer survival

Immunologic targeting of cells using vaccines raised against the host's tumor offers the potential for specific, nontoxic cancer therapy. A recent trial has shown that custom-made peptide vaccination can induce or enhance cytotoxic lymphocyte (CTL) and interferon-γ (IFN-γ) response to *p53* or *K-ras* in a range of cancers, without any toxicity.

Based on the presence of suitable mutations in *p53* or *K-ras*, only 14% of patients screened for inclusion in the trial were eligible for specific immunization, emphasizing the difficulty of a broad clinical approach for custom-made peptide immunization. In all, 38 patients with mutations in *p53* or *K-ras* underwent immunization with a cellular vaccine consisting of irradiated mutant peptide-pulsed peripheral-blood mononuclear cells. Of these, 10 patients had detectable CTL responses to the mutant protein after treatment, and 2 were positive at baseline. Positive IFN-γ responses were seen in 16 patients (42%) on treatment and 4 at baseline. Baseline immune response was enhanced after immunization. Of the 29 patients with evident disease, 5 went on to have a period of disease stability. Median survival times were 393 versus 98 days for a positive versus negative CTL response ($P = 0.04$) and 470 versus 88 days for a positive versus negative IFN-γ response ($P = 0.02$). Detectable CTL response and IFN-γ reaction were favorable prognostic markers.

CTL and IFN-γ response was associated with significantly prolonged survival, although the authors state that the degree to which this association was a direct consequence of the vaccination is unclear. Additional studies are currently underway.

Carol Lovegrove

Original article Carbone DP *et al.* (2005) Immunization with mutant *p53*- and *K-ras*-derived peptides in cancer patients: immune response and clinical outcome. *J Clin Oncol* **23:** 5099–5107

A novel technique for the quantitative measurement of malignant ascites

A multidisciplinary team from Japan has recently reported a new objective method for the quantitative measurement of malignant ascites. Oriuchi and co-workers have developed an accurate, simple and reproducible procedure, which they assert will facilitate evaluation of response to therapy in patients with PERITONITIS CARCINOMATOSA.

Helical CT scans of the abdomen were performed in 12 patients with various primary tumors, and the thickness of ascites measured in five locations across three transverse planes—the bilateral subphrenic space, the bilateral paracolic space and the pre-bladder space. The average thickness was then multiplied by the area of the standard abdominal cavity (1,000 cm^2) to calculate the volume of ascites in milliliters. To validate the accuracy of the procedure, the current gold-standard method of assessment—the 3D-CT volume rendering method—was also performed, and the volumes obtained using the two different techniques were compared. The correlation between the volumes was found to be consistent and statistically significant (correlation coefficient 0.956; $P < 0.01$). The correlation was most marked in patients with an ascitic volume of ≥300 ml.

The authors conclude that the accuracy of this new procedure compares well with that of the volume rendering method, but the new technique has the advantage of requiring no specific radiological expertise, making it a simple and practical choice for the follow-up of patients with malignant ascites.

Alexandra King

Original article Oriuchi N *et al.* (2005) A new, accurate and conventional five-point method for quantitative evaluation of ascites using plain computed tomography in cancer patients. *Jpn J Clin Oncol* **35:** 386–390

GLOSSARY

PERITONITIS CARCINOMATOSA
Peritoneal dissemination of cancer cells with malignant ascites