IN BRIEF

SIGNAL TRANSDUCTION

EZH2 is a key regulator of angiogenesis

Lu, C. *et al. Cancer Cell* **18**, 185–197 (2010)

EZH2 is involved in DNA methylation and has been implicated in the progression and metastasis of several cancers. The investigators of this study found that VEGF stimulation increases EZH2 levels in the tumor vasculature, which leads to methylation and inactivation of the antiangiogenic factor vasohibin 1. Conversely, silencing of *EZH2* both *in vitro* and in an ovarian cancer model significantly decreased angiogenesis and tumor burden owing to increased vasohibin 1 expression. As a result of this work, Lu and colleagues have developed and characterized a highly effective method of gene silencing in tumor cells. They also show that targeting EZH2 might represent an important strategy for the treatment of cancer.

IMMUNOTHERAPY

Adoptive cell therapy for melanoma brain metastases

Hong, J. J. *et al. Clin. Cancer Res.* **16**, 4892–4898 (2010)

Adoptive cell therapy (ACT) is based on the transfusion of autologous lymphocytes in patients with cancer to control tumor growth. A recent study was designed to determine the objective response rate and response duration of melanoma brain metastases to ACT plus interleukin-2. Of 17 patients who received ACT with tumor-infiltrating lymphocytes, 41% achieved a complete response in the brain and six patients achieved an overall partial response. Two patients achieved complete response in the brain using ACT with peripheral blood lymphocytes that had been transduced to recognize specific melanoma differentiation antigens. This study shows that ACT with interleukin-2 is safe and effective in selected patients with metastatic melanoma to the brain.

CHEMOTHERAPY

HuR status as a novel biomarker for prognosis and response in pancreatic ductal adenocarcinoma

Richards, N. *et al. Ann. Surg.* **252**, 499–505 (2010)

Treatment of pancreatic ductal adenocarcinoma (PDA) includes surgery and/or chemotherapy with gemcitabine. No reliable biomarker currently exists for prognosis and response to therapy. Here, a tissue microarray of 53 PDA specimens was analyzed, and the status of the mRNA binding protein HuR, together with COX2 and VEGF were correlated with clinicopathological and survival data. HuR status was associated with high tumor T stage and, surprisingly, was a positive predictive marker for overall survival in patients treated with gemcitabine. HuR levels can identify patients with PDA who will respond to gemcitabine, and HuR status could, therefore, be used for the individualized treatment of PDA in the future.