

experiencing grade 3 vomiting in a single cycle of treatment.

The authors conclude that temozolomide shows potential in the treatment of primary brain lymphomas, and suggest that further studies of this agent are warranted.

**Original article** Reni M *et al.* (2007) Temozolomide as salvage treatment in primary brain lymphomas. *Br J Cancer* **96**: 864–867

## Molecular profiling of circulating tumor cells guides treatment selection

Factors that contribute to prostate cancer growth and survival vary over time, which might mean that drug therapies lose effectiveness in a given individual. Assessment of the molecular profile of tumors through analysis of circulating tumor cells (CTCs) might help to target therapy. Shaffer and colleagues collected peripheral blood from patients with advanced prostate cancer and used immunomagnetic-capture technology to isolate and analyze CTCs.

Around 7.5 ml of blood was collected from each of 63 patients with metastatic prostate cancer and from 17 controls without cancer at one US center. CTCs were captured with antibodies to the epithelial cell adhesion molecule and underwent immunofluorescent, Papanicolaou staining and fluorescence *in situ* hybridization. To assess whether cell counts changed over time, additional samples were taken within 24 h of the first sample and at 72 h or at 96 h.

The mean CTC count in patients with prostate cancer was 16 cells/7.5 ml blood (range 0–847 cells). Subsequent CTC counts did not differ from those of the first samples. Cells expressed cytokeratin AE1/AE3 and  $\alpha$ -methyl CoA racemase. There was marked amplification of the androgen receptor locus in five patients with CTC counts of 50 or more. Four of these patients, and an additional two, showed signals of tetraploidy. No amplification of *ERBB2* (*HER2*) was observed. The proportion of CTCs positive for EGFR ranged from 0% to 100% (median 56%).

The authors hope that ongoing prospective studies will validate the markers identified, which

might in turn improve clinical management of patients.

**Original article** Shaffer DR *et al.* (2007) Circulating tumor cell analysis in patients with progressive castration-resistant prostate cancer. *Clin Cancer Res* **13**: 2023–2029

## Aspirin therapy is safe in cancer patients with ACS and thrombocytopenia

The benefits of aspirin therapy in patients with acute coronary syndromes (ACS) have been well documented. AHA/ACC guidelines recommend aspirin in all cases of ACS; however, it has been suggested that the bleeding risks associated with aspirin might outweigh the benefits of this therapy in patients with thrombocytopenia. Sarkiss *et al.* have evaluated aspirin therapy in cancer patients with ACS and thrombocytopenia secondary to chemotherapy or bone marrow suppression.

The authors retrospectively reviewed the records of 70 patients with cancer who had been diagnosed with ACS and referred for cardiology consultation. The 27 patients with thrombocytopenia (platelet counts  $\leq 1.0 \times 10^{11}/l$ ) had worse 7-day survival than the 43 patients without thrombocytopenia (37% vs 77%;  $P=0.0012$ ). Among the nonthrombocytopenic patients, aspirin therapy was associated with improved 7-day survival compared with no aspirin therapy (88% vs 45%;  $P=0.0096$ ). Notably, aspirin therapy was also associated with better 7-day survival in those patients with thrombocytopenia (90% vs 6%;  $P<0.0001$ ). No major adverse bleeding events were observed; minor bleeding was seen in 12 patients, but was not associated with aspirin use.

Aspirin could, therefore, be beneficial in cancer patients with ACS with or without thrombocytopenia. The authors also report similar observed benefits of  $\beta$ -blocker use on 7-day survival in patients with and without thrombocytopenia. They do warn, however, that clinicians should consider individual cases carefully, as the potential for serious bleeding complications in thrombocytopenia remains high.

**Original article** Sarkiss MG *et al.* (2007) Impact of aspirin therapy in cancer patients with thrombocytopenia and acute coronary syndromes. *Cancer* **109**: 621–627