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IN BRIEF

OVARIAN CANCER

FAK — new target for antiangiogenic therapy

Antiangiogenic therapy combined with chemotherapy has improved overall survival in some patients with ovarian cancer. Tumour growth can, however, be accelerated following antiangiogenic-therapy cessation. The mechanisms underlying this 'rebound' tumour-growth effect are unknown. A study in a mouse model has revealed that cessation of antiangiogenic therapy increased tumour growth and was accompanied by hypoxia, increased tumour angiogenesis, and vascular leakage. Platelet infiltration into tumours following therapy withdrawal, and lowering platelet counts inhibited tumour rebound. Moreover, focal adhesion kinase (FAK) in platelets regulated this tumour infiltration, and FAK-deficiency in platelets completely prevented the rebound in tumour growth. Collectively, these data indicate that FAK might be a unique therapeutic target when antiangiogenic agents are withdrawn, and that dual targeting of FAK and VEGF could have therapeutic implications.

ORIGINAL ARTICLE Haemmerle, M. *et al.* FAK regulates platelet extravasation and tumor growth after antiangiogenic therapy withdrawal. *J. Clin. Invest.* http://dx.doi.org/10.1172/JCI85086 (2016)

HAEMATOLOGICAL CANCER

Rituximab and chemotherapy — a new standard?

The addition of rituximab to short-course intensive chemotherapy has been suggested to improve outcomes for patients with Burkitt's lymphoma, including Burkitt's leukaemia. Now, an open-label, randomized, controlled, phase III trial in patients with untreated HIV-negative Burkitt's lymphoma has confirmed that the 3-year event-free survival (EFS; the primary end point of the trial) was significantly improved with the addition of rituximab to chemotherapy. In the trial, patients were stratified into two groups based on disease extension. Adverse effects did not differ considerably between patients who did or did not receive rituximab. These results indiate that rituximab and intensive short-course chemotherapy improves EFS in adults with Burkitt's leukaemia or lymphoma, and could become the new standard therapy for this disease.

ORIGINAL ARTICLE Ribrag, V. *et al.* Rituximab and dose-dense chemotherapy for adults with Burkitt's lymphoma: a randomised, controlled, open-label, phase 3 trial. *Lancet* http://dx.doi.org/10.1016/S0140-6736(15)01317-3 (2016)

HEAD AND NECK CANCER

Reducing neck dissection via PET–CT surveillance

The role of imaging in the surveillance of patients with node-positive advanced-stage head and neck cancer is unclear, and whether patients should undergo a planned neck dissection following primary chemoradiation treatment is controversial. In a prospective, randomized, controlled trial, investigators assessed the noninferiority of PET–CT-guided surveillance to planned neck dissection in patients with stage N2 or N3 nodal disease. At a median follow up of 36 months, PET–CT resulted in fewer neck dissections than planned surgery (54 versus 221). Moreover, the hazard ratio for death slightly favoured PET–CT-guided surveillance, and indicated noninferiority of surveillance compared with planned neck dissection. Survival was similar among patients who underwent PET–CT-guided surveillance and those who had a planned neck dissection; however, surveillance resulted in considerably fewer operations and was more cost-effective, with a saving of UK£1,492 per patient over the course of the trial.

ORIGINAL ARTICLE Mehanna, H. *et al.* PET–CT surveillance versus neck dissection in advanced head and neck cancer. *N. Engl. J. Med.* **374**, 1444–1454 (2016)