Nature Reviews Clinical Oncology 9, 307 (2012); published online 24 April 2012;

doi:10.1038/nrclinonc.2012.77; doi:10.1038/nrclinonc.2012.79; doi:10.1038/nrclinonc.2012.80

IN BRIEF

FROM AACR—LYMPHOMA

A precise approach for diffuse large B-cell lymphoma

On the basis of preclinical evidence that had previously shown that overexpression of Bruton's tyrosine kinase (BTK) drives progression of diffuse large B-cell lymphoma (DLBCL), Staudt and colleagues have tested the efficacy of the BTK inhibitor, ibrutinib, in a phase I study. Ten patients with refractory activated B-cell-like (ABC) subtype of DLBCL received 560 mg of oral ibrutinib daily. Ibrutinib induced a good response in half of the patients, including a complete response that lasted for more than 16 months. Toxic effects were grade 2 diarrhoea, nausea, and fatigue. Interestingly, results from an ongoing phase II study have showed some responses in non-ABC DLBCL, suggesting a broader role of ibrutinib in the treatment of DLBCL.

Original abstract Staudt, L. M. Therapeutic targeting of B cell receptor signaling in activated B cell-like (ABC) diffuse large B cell lymphoma with the BTK Inhibitor ibrutinib. Presented at the AACR annual meeting (Chicago, IL, 2012)

FROM AACR—GYNECOLOGICAL CANCER

Controlling recurrent ovarian cancer

Selumetinib, a MEK-1 and MEK-2 inhibitor, has showed clinical activity in recurrent, low-grade serous ovarian cancer in a phase II study led by John Farley. The study enrolled 52 women, half of whom had already received at least three previous chemotherapy regimens. After receiving an oral dose of selumetinib of 50 mg twice a day, 15% of patients had complete or partial response, whereas another 65% of patients had stable disease, which was controlled in 81% of them. Median progression-free survival was 11 months. The most common toxic effects were nausea, vomiting, and rash (grade 3), and only three patients had grade 4 toxic effects. Interestingly, the activity of the drug did not seem to depend on mutations in RAS or RAF, although this observation might be due to the low number of tumour samples analyzed.

Original abstract Farley, J. et al. A phase II trial of selumetinib in women with recurrent low-grade serous carcinoma of the ovary or peritoneum [Abstract CT-05]. Presented at the AACR annual meeting (Chicago, IL, 2012)

FROM AACR—UROLOGICAL CANCER

Antiangiogenic therapy works in metastatic urothelial cancer

Pazopanib has been shown to be clinically effective in metastatic urothelial cancer, according to the final results of a study conducted by Andrea Necchi and colleagues. In the phase II trial, 41 patients with refractory disease who had been previously treated with chemotherapy received 800 mg once-daily pazopanib. At follow-up, 17% had a partial response to therapy and 59% patients had stable disease, which translates into 76% of patients benefiting from the drug. Median progression-free survival and overall survival were 2.6 months and 4.7 months, respectively. More importantly, interleukin-8 was identified as clear indicator of tumour progression and shorter overall survival after just 4 weeks of treatment.

Original abstract Necchi, A. et al. Biomarker analysis and final results of INT70/09 phase II proof-of-concept study of pazopanib (PZP) in refractory urothelial cancer [Abstract LB-433]. Presented at the AACR annual meeting (Chicago, IL, 2012)