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IN THE NEWS

FROM ENA 2014

At the EORTC–NCI–AACR (ENA) Symposium in Barcelona, promising data for AG-120, an oral inhibitor of the mutated *IDH1* gene product, was presented in patients with advanced-stage acute myeloid leukaemia (AML). This is the first demonstration of clinical activity of this agent in patients with AML who harbour this mutated gene, and the drug was shown to be well tolerated.

Other impressive data were reported in patients with hereditary leiomyomatosis and renal cell cancer (RCC)—an advanced form of kidney cancer that has a very poor prognosis and no standard treatment—who responded well to bevacizumab and erlotinib. Around 30% of patients with sporadic papillary RCC showed very good partial responses, many of which were durable. As a result, this drug combination will be explored further in larger trials.

A study in women with ovarian tumours sensitive to platinum-based chemotherapy and who carry *BRCA1/2* mutations showed a good response to the PARP inhibitor rucaparib. Although the biomarker field is often disappointing, the researchers identified a biomarker that could predict which women without *BRCA1/2* mutations would respond to the drug. This is the first time that a predictor for response has been identified for such women and is a step forward for this difficult-to-treat disease.

Other preclinical findings have revealed that the antiviral drug cidofovir is being repurposed for patients with cervical cancer. Promising data have shown that cidofovir sensitizes cervical cancer to chemotherapy and radiotherapy without an increase in toxic adverse effects. As a result, the first phase I clinical trial in patients with cervical cancer using cidofovir to target HPV oncoproteins in combination with chemoradiation is being conducted. In 15 women who entered the trial, the major dose-limiting adverse effect of cidofovir—permanent kidney damage—was not observed. Thus, the combination of cidofovir with chemoradiation represents a new, targeted anticancer approach.

Progress has been made using drugs that target different pathways in patients with *BRAF*-mutant advanced-stage colorectal cancer. In a phase I trial of 54 patients treated with triple combination therapy (targeting BRAF, EGFR and PI3K with encorafenib, cetuximab and alpelisib, respectively), tumour shrinkage occurred in 32%. Moreover, some patients were free from disease progression for 19 weeks with manageable adverse effects, which is particularly encouraging as these patients have limited treatment options.

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