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IN BRIEF

FROM AACR—GENETICS

Alterations revealed in head and neck cancer

Results from The Cancer Genome Atlas project that were obtained from 279 patients with head and neck squamous cell carcinoma were presented at the annual AACR meeting. Significant somatic copy number alterations were observed at 30 sites, many of which overlapped with those identified for lung squamous cell carcinoma. Interestingly, patients who tested positive for human papilloma virus (HPV) had a different profile to those who were HPV negative, indicating that there might be different treatment strategies for these patient cohorts.

Original abstract Hayes, D. H., Grandis, J. & El-Naggar, A. K. Comprehensive genomic characterization of squamous cell carcinoma of the head and neck in the Cancer Genome Atlas [abstract]. *Proc. Ann. Meeting AACR* a1117 (2013)

FROM AACR—IMMUNOTHERAPY

Two-step approach holds promise for ovarian cancer

An immunotherapeutic strategy combining a dendritic cell vaccine with adoptive T-cell therapy has shown clinical benefit in patients with advanced stage III and IV ovarian cancer, according to data from two phase I trials presented at the AACR meeting. Dendritic cells were isolated from patients and a vaccine was prepared by exposing the patients' dendritic cells to their own tumour tissue. Of the 19 patients treated with the vaccine, eight had no measurable disease and one achieved complete remission.

Original abstract Kandalaft, L. E., Tanyi, J., Chiang, C., Powell, D. & Coukos, G. Autologous whole-tumour antigen vaccination in combination with adoptive T cell therapy for patients with recurrent ovarian cancer [abstract]. *Proc. Ann. Meeting AACR* LB-335 (2013)

FROM AACR—SKIN CANCER

Intermittent vemurafenib prevents resistance in melanoma

Results from a study suggest that an intermittent treatment regimen might prevent drug-resistance in patients with melanoma. Vemurafenib-resistant tumours in mice and humans where shown to be dependent on the drug to grow. In 14 out of 19 patients with vemurafenib-resistant tumours, tumour growth decreased after treatment cessation. In animal models, drug resistance was prevented by intermittent dosing. Taken together, these data indicate that intermittent treatment might prevent vemurafenib resistance.

Original abstract Das Thakur, M. *et al*. Modeling vemurafenib resistance in melanoma reveals a strategy to forestall drug resistance [abstract]. *Proc. Ann. Meeting AACR* LB-144 (2013)

FROM AACR—CHEMOTHERAPY

Combination therapy shows activity in *BRCA*-mutant tumours

The maximum tolerated doses of sapacitabine (a nucleoside analogue) and seliciclib (a CDK inhibitor) have been determined in a phase I combination trial in patients with solid tumours (50 mg and 1,200 mg twice daily, respectively). Interestingly, patients with *BRCA* mutations were more likely to achieve a partial response than those without *BRCA* mutations. These drugs are thought to work synergistically to induce DNA damage, therefore, *BRCA*-mutant cancers that cannot repair DNA damage are sensitive to this combination.

Original abstract Shapiro, G. *et al*. Responses to sequential sapacitabine and seliciclib in patients with BRCA-deficient solid tumors [abstract]. *Proc. Ann. Meeting AACR* LB-202 (2013)