Nature Reviews Clinical Oncology **12**, 502 (2015); published online 23 June 2015; doi:10.1038/nrclinonc.2015.114; doi:10.1038/nrclinonc.2015.115; doi:10.1038/nrclinonc.2015.116; doi:10.1038/nrclinonc.2015.119

IN BRIEF

MELANOMA

Dabrafenib and trametinib improve overall survival

The latest report from a phase III clinical trial investigating patients with BRAF^{V600K/E} mutated unresectable stage IIIC or IV melanoma reveals that patients receiving a combination of dabrafenib and trametinib have superior overall survival compared with those receiving dabrafenib alone. Median overall survival was 25.1 months in the combination group versus 18.1 months in the dabrafenib only group. These findings suggest that the dabrafenib and trametinib combination should become the standard treatment of BRAF^{V600K/E} mutated melanoma.

Original article Long, G. V. *et al.* Dabrafenib and trametinib versus dabrafenib and placebo for Val600 BRAF-mutant melanoma: a multicentre, double-blind, phase 3 randomised controlled trial. *Lancet* doi:10.1016/S0140-6736(15)60898-4

HAEMATALOGICAL CANCER

Elotuzumab reduces risk of multiple myeloma progression

Findings of a phase III clinical trial in patients with relapsed or refractory multiple myeloma reveal that addition of elotuzumab, an immunostimulatory monoclonal antibody, to a treatment regimen of lenalidomide and dexamethasone results in a 30% reduction in the risk of disease progression or death. Few adverse events overall were detected in either treatment group, although 10% of patients in the elotuzumab group experienced grade 3 or 4 adverse events. These findings indicate that elotuzumab can be included in existing treatment regimens, and improves the outcomes of patients with relapsed or refractory multiple myeloma.

Original article Lonial, S. et al. Elotuzumab therapy for relapsed or refractory multiple myeloma. N. Engl. J. Med. doi:10.1056/NEJMoa1505654

GENETICS

Whole-exome sequencing yields clinically useful information

An investigation exploring the direct clinical application of whole-exome sequencing (WES) to detect potential therapeutic targets in patients with metastatic cancers has yielded clinically useful information, including the identification of alterations for which an approved drug is available or in preclinical development in 94% of tumours. Despite these results, only 5% of patients had WES-guided interventions—suggesting that changes in access to targeted therapies are required for a wider effect of WES on patient management.

Original article Beltran, H. et al. Whole-exome sequencing of metastatic cancer and biomarkers of treatment response. JAMA Oncol. doi:10.1001/jamaoncol.2015.1313

GYNAECOLOGICAL CANCER

Less than three doses of HPV-16/18 prevents HPV infection

A post-hoc analysis of data from two phase III trials demonstrates that a one-dose or two-dose vaccination schedule provides similar protection against human papilloma virus (HPV)-16/18 infection compared with that obtained using a three-dose schedule in 15–25-year-old women, 4 years after vaccination. These findings indicate a need for direct assessments of the effectiveness of single-dose HPV-16/18 vaccinations in young women.

Original article Kreimer, A. R. Efficacy of fewer than three doses of an HPV-16/18 AS04-adjuvanted vaccine: combined analysis of data from the Costa Rica Vaccine and PATRICIA trials. *Lancet Oncol.* doi:10.1016/S1470-2045(15)00047-9