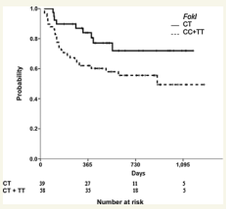
Clinical Cancer Research
Highlights
August 1, 2019 • Volume 25 • Number 15

Selected Articles from This Issue

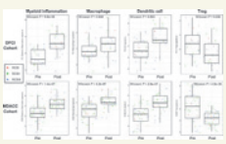
Impact of Vitamin D Receptor Genotype on Graft Versus Host Disease



In a phase I/II trial, vitamin D was shown to prevent chronic graft versus host disease (cGvHD) in patients undergoing allogenic hematopoietic stem cell transplantation (allo-HSCT). Carrillo-Cruz and colleagues followed up their trial with an assessment of the impact of SNPs in the vitamin D receptor (VDR) on the efficacy of vitamin D. Patients with the VDR FokI CT genotype showed the greatest protection from cGvHD after vitamin D treatment and allo-HSCT. These results facilitate the stratification of patients for whom vitamin D would be most beneficial. ■

See article by Carrillo-Cruz et al., p. 4616

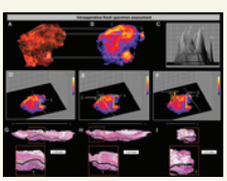
M2-like Macrophage Enrichment Following Chemotherapy in HR+/HER2 Breast Cancer



Hormone receptor-positive/HER2-negative (HR+/HER2-) breast cancer patients do not typically benefit from checkpoint inhibitors. Waks and colleagues analyzed the tumor-immune microenvironment before and after neoadjuvant chemotherapy in 96 patients with HR+/HER2 breast cancer. The immune microenvironment was found to change after treatment: a significant increase in genes associated with protumor M2-like macrophages was observed, compared with a decrease in $CD8^+$ T cells and stromal tumor-infiltrating lymphocytes. These results suggest that the combination of chemotherapy with macrophage-targeting agents may be an effective immunotherapy approach in HR+/HER2 breast cancer. ■

See article by Waks et al., p. 4644

Fluorescence-Based Monitoring of Tumor Margins During Surgery



Surgical resection is an integral component of treatment for solid tumors; however, cancer cells often are not completely removed at the tumor margins, leading to recurrence. van Keulen and colleagues describe a novel imaging strategy for use during surgical tumor excision. Twelve head and neck cancer patients received systemic administration of a tumor-specific contrast agent (panitumumab-IRDye800), and the tumors were visualized after surgery using a fluorescence imager. This fluorescence-based strategy consistently identified tumor margins and could have broad implications for surgical oncology. ■

See article by van Keulen et al., p. 4656

Detection of Targetable Kinase Fusions by DNAseq and RNAseq

Comprehensive detection of targetable kinase fusions in lung cancer patients is clinically critical but technically challenging. Benayed and colleagues evaluated targeted RNAseq for the identification of gene fusions in patients where no clear mitogenic driver alteration was found by DNAseq-based panel testing. Actionable kinase fusions or MET exon 14 skipping was identified in 13% of cases that were previously determined to be fusion-negaive by DNAseq. Among the driver-negative samples tested by RNASeq, those with low tumor mutation burden were significantly enriched for gene fusions. Therefore, targeted RNASeq complementing large panel DNAseq can be effective in comprehensively uncovering targetable gene fusions. ■

See article by Benayed et al., p. 4712

Clinical Cancer Research

Highlights of This Issue

Clin Cancer Res 2019;25:4581.