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Précis: Prospective analysis reveals the accuracy and sensitivity of cell-free DNA-based sequencing in detecting tumor-derived actionable mutations in patients with advanced pancreatobiliary cancer.

An Oncogenic NTRK Fusion in a Patient with Soft-Tissue Sarcoma with Response to the Tropomyosin-Related Kinase Inhibitor LOXO-101 1049
Précis: A highly selective TRK inhibitor induced rapid tumor regression in a patient with metastatic soft-tissue sarcoma harboring an oncogenic LMNA-NTRK1 gene fusion.

Detection of Enhancer-Associated Rearrangements Reveals Mechanisms of Oncogene Dysregulation in B-cell Lymphoma 1058
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Pancreatic Cancer Metastases Harbor Evidence of Polyclonality ............1086
R. Maddipati and B.Z. Stanger
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Regulatory T-cell Response to Enterotoxigenic Bacteroides fragilis Colonization Triggers IL17-Dependent Colon Carcinogenesis ...............1098
Précis: Regulatory T cells drive differentiation of procarcinogenic Th17 cells and promote the early stages of colon tumorigenesis in response to bacterial infection.
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Geis and colleagues found that depletion of regulatory T cells (Treg) unexpectedly impaired early microadenoma formation in multiple intestinal neoplasia mice colonized by the bacterium enterotoxigenic Bacteroides fragilis (ETBF). This reduction in neoplastic growth was accompanied by a decrease in Th17 cells and IL17 production and an increase in the IFNγ-producing Th1 cell population, suggesting that Tregs modulate the balance of Th1/Th17 cells. Treg consumption of IL2 resulted in an increase in Th17 polarization and a subsequent decrease in the Th1 population following ETBF colonization, consistent with a cell-extrinsic role for Tregs in promoting Th17 differentiation. These results demonstrate that Tregs drive Th17 polarization to establish pro-tumorigenic colitis and are necessary for the early stages of tumorigenesis in colitis-associated colorectal cancer. For details, please see the article by Geis and colleagues on page 1098.

ON THE COVER
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