Cancer Research

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3228  Global Transcriptome Analysis of Formalin-Fixed Prostate Cancer Specimens Identifies Biomarkers of Disease Recurrence
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3294 Inhibiting Tankyrases Sensitizes KRAS-Mutant Cancer Cells to MEK Inhibitors via FGFR2 Feedback Signaling
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Précis: This study addresses the long-standing challenge of developing highly effective therapeutics against KRAS-mutant cancers, also identifying a strategy to suppress a newly discovered resistance mechanism

3306 Separating Tumorigenicity from Bile Acid Regulatory Activity for Endocrine Hormone FGF19
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Précis: The discovery of an aberrant stem-like cell proliferation associated with dysregulation of a factor that binds chromosomes during mitosis has general implications in cancers in which that factor is dysregulated.

3344 Impaired JNK Signaling Cooperates with KrasG12D Expression to Accelerate Pancreatic Ductal Adenocarcinoma
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Précis: Evidence gleaned from a preclinical model of pancreatic cancer suggests that JNK activation limits K-ras-induced tumor development, identifying a suppressor pathway in this system.
Transient Induction of ING4 by Myc Drives Prostate Epithelial Cell Differentiation and Its Disruption Drives Prostate Tumorigenesis

Penny L. Berger, Sander B. Frank, Veronique V. Schulz, Eric A. Nollet, Matthew J. Edick, Brittany Holly, Ting-Tung A. Chang, Galen Hostetter, Suwon Kim, and Cindy K. Miranti

Précis: This study identifies a pivotal signaling node that may explain why MYC and PTEN inactivation cooperate in prostate tumorigenesis.

E2F1 Responds to Ultraviolet Radiation by Directly Stimulating DNA Repair and Suppressing Carcinogenesis

Anup Kumar Biswas, David L. Mitchell, and David G. Johnson

Précis: This article defines a nontranscriptional function in DNA repair for the core cell-cycle regulatory transcription factor E2F1.

ABOUT THE COVER

B-Raf^{V600E} inhibitors are potent at halting melanoma progression in patients harboring oncogenic B-Raf^{V600E} mutation. Recent studies indicate that chemotherapies and other target treatments suppress tumor growth via a host immunity-dependent manner. Using a genetically modified mouse model of melanoma, it was found that diminished CD40L- and IFNγ-mediated signaling contributed to the formation of immunosuppressive tumor microenvironment and that treatment with a Braf^{V600E} inhibitor, PLX4720, could reinvigorate local immune function. Indeed, maximal effectiveness of PLX4720 was dependent on restoration of CD40L- and IFNγ-mediated immune signals. This study illustrates that certain chemotherapies directed at the tumor rely on immune signaling pathways and that this has relevance for the design of combined treatments with immunotherapies. For details, see the article by Ho and colleagues on page 3205.