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387 PTBP3-Mediated Regulation of ZEB1 mRNA Stability Promotes Epithelial-Mesenchymal Transition in Breast Cancer
Pingli Hou, Lin Li, Fang Chen, Yansu Chen, Hui Liu, Jingjing Li, Jin Bai, and Junnian Zheng

**Significance:** These findings define PTBP3 as a regulator of EMT that acts by governing expression of ZEB1, and they establish an oncogenic function of PTBP3, suggesting its candidacy as a theranostic target.
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LSR Antibody Therapy Inhibits Ovarian Epithelial Tumor Growth by Inhibiting Lipid Uptake
Kosuke Hiramatsu, Satoshi Serada, Takayuki Enomoto, Yusuke Takahashi, Satoshi Nakagawa, Satoshi Nojima, Akiko Motimoto, Shinya Matsuzaki, Takuhei Yokoyama, Tsuyoshi Takahashi, Minoru Fujimoto, Hiroshi Takemori, Yutaka Ileda, Kiyoshi Yoshino, Eiichi Morii, Tadashi Kimura, and Tetsuji Naka

Significance: These findings offer preclinical evidence of the therapeutic efficacy of a novel targeted antibody therapy against deadly epithelial ovarian cancers.

Atypical G Protein β3 Promotes Cardiac Oxidative Stress, Apoptosis, and Fibrotic Remodeling in Response to Multiple Cancer Chemotherapeutics
Sreemoyee Chakraborti, Arnab Pramanick, Sudipta Saha, Somnath Singha Roy, Arnab Ray Chaudhuri, Madhusudan Das, Sujoy Ghosh, Adele Stewart, and Biswanath Maity

Significance: These findings suggest that inhibiting an atypical G-protein might provide a strategy to limit the cardiotoxicity in cancer patients treated with anthracyclines, taxanes, or fluoropyrimidines.

New Mechanisms of Resistance to MEK Inhibitors in Melanoma Revealed by Intravital Imaging
Hailey E. Brighton, Steven P. Angus, Tao Bo, Jose Roques, Alicia C. Tagliatela, David B. Darr, Kubra Karagoz, Noah Siclaky, Michael L. Gatz, Norman E. Sharpless, Gary L. Johnson, and James E. Bear

Significance: A longitudinal study tracks the course of MEKi treatment in an autochthonous imageable murine model of melanoma from initial response to therapeutic resistance, offering new insights into the basis for drug response, persistence, and resistance.

Photodynamic Priming Mitigates Chemotherapeutic Selection Pressures and Improves Drug Delivery
Huang-Chiao Huang, Imran Rizvi, Joyce Liu, Srijam Anbil, Ashish Kalra, Helen Lee, Yan Baglo, Nancy Paz, Douglas Hayden, Steve Pereira, Brian W. Pogue, Jonathan Fitzgerald, and Tayyaba Hasan

Significance: A biophysical priming approach overcomes key treatment barriers, significantly reduces metastases, and prolongs survival in orthotopic models of human pancreatic cancer.

Vitamin C Sensitizes Melanoma to BET Inhibitors
Sushmita Mustafi, Vladimir Camarena, Claude-Henry Volmar, Tyler C. Huff, David W. Sant, Shaun P. Brothers, Zhao-Jun Liu, Claes Wahlestedt, and Gaofeng Wang

Significance: This study shows that ascorbate can enhance the efficacy of BET inhibitors, providing a possible clinical solution to challenges arising in phase I trials from the dose-dependent side effects of this class of epigenetic therapy.

Correction: Mismatch Repair Proteins Initiate Epigenetic Alterations during Inflammation-Driven Tumorigenesis

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ABOUT THE COVER

Visualizing endogenous melanoma and bundled collagen throughout tumor development. Intravital multiphoton imaging of (i) melanoma expressing a tdTomato fluorescent reporter, and (ii) second harmonic generation enables direct observation of cancer cells and the extracellular matrix over time from early to late phases of tumor growth. Through intravital microscopy, it was found that collagen degrades as melanoma grows. However, when treated with MAPK inhibitors, bundled collagen reemerges to promote cancer resistance to drug. For details, see article by Brighton and colleagues on page 542.