Antisense Inhibition of Survivin Expression as a Cancer Therapeutic
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Spliceosome-Mediated RNA Trans-Splicing Facilitates Targeted Delivery of Suicide Genes to Cancer Cells
Christina Gruber, Iris K. Gratz, Eva M. Murauer, Elisabeth Mayr, Ulrich Koller, Leena Bruckner-Tuderman, Guerrino Meneguzzi, Helmut Hintner, and Johann W. Bauer

A Robust High-Content Imaging Approach for Probing the Mechanism of Action and Phenotypic Outcomes of Cell-Cycle Modulators
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Anticancer Activity of a Combination of Cisplatin and Fisetin in Embryonal Carcinoma Cells and Xenograft Tumors
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p53R2 Inhibits the Proliferation of Human Cancer Cells in Association with Cell-Cycle Arrest
Keqiang Zhang, Jun Wu, Xiwei Wu, Xiaochen Wang, Yan Wang, Ning Zhou, Mei-ling Kuo, Xiyong Liu, Bingsen Zhou, Lufen Chang, David Ann, and Yun Yen

Integrating Mammalian Target of Rapamycin and Cell Growth Inhibition in a Genetically Engineered Mouse Model of Nf1-Deficient Astrocytes
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Low-Dose Fractionated Radiation Potentiates the Effects of Cisplatin Independent of the Hyper-Radiation Sensitivity in Human Lung Cancer Cells
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Silencing of Tubulin Binding Cofactor C Modifies Microtubule Dynamics and Cell Cycle Distribution and Enhances Sensitivity to Gemcitabine in Breast Cancer Cells
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Chromatin Structure Predicts Epigenetic Therapy Responsiveness in Sarcoma
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Ovarian Cancer Stem Cell–Like Side Populations Are Enriched Following Chemotherapy and Overexpress EZH2
Sián Rizzo, Jenny M. Hersey, Paul Mellor, Wei Dai, Alessandra Santos-Silva, Daniel Liber, Louisa Luk, Ian Titley, Craig P. Carden, Garry Box, David L. Hudson, Stanley B. Kaye, and Robert Brown

Knockdown of Oncogenic KRAS in Non–Small Cell Lung Cancers Suppresses Tumor Growth and Sensitizes Tumor Cells to Targeted Therapy
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Transcription Factor Stat5
Knockdown Enhances Androgen Receptor Degradation and Delays Castration-Resistant Prostate Cancer Progression In vivo

Christian Thomas, Amina Zoubeidi, Hidetoshi Kuruma, Ladan Fazli, Francois Lamoureux, Eliana Beraldi, Brett P. Monia, A. Robert MacLeod, Joachim W. Thuroff, and Martin E. Gleave

Preclinical Pharmacology, Antitumor Activity, and Development of Pharmacodynamic Markers for the Novel, Potent AKT Inhibitor CCT128930


ABOUT THE COVER

Multivariate analysis and high-content imaging allow the detailed investigation of treatment effects at the cellular level, yet the reproducibility of such assessments has not been thoroughly investigated. A model calibrated at each experiment accounts for variation in experimental conditions and allows for the reproducible assessment of phenotype induced by cell cycle modulators. An extensive survey of cell cycle inhibitors highlights the prevalence of phenotypic variability in response to agents within a mechanistic class and the occurrence of concentration-dependent changes in phenotype. For details, see the article by Sutherland and colleagues on page 242.