REVIEW

Is Wilms Tumor a Candidate Neoplasia for Treatment with WNT/β-Catenin Pathway Modulators?—A Report from the Renal Tumors Biology-Driven Drug Development Workshop
Daniela Perotti, Peter Hohenstein, Italia Bongarzone, Mariana Maschietto, Mark Weeks, Paolo Radice, and Kathy Pritchard-Jones

SMALL MOLECULE THERAPEUTICS

Urokinase Plasminogen Activator System–Targeted Delivery of Nanobins as a Novel Ovarian Cancer Therapy

Apigenin Sensitizes Colon Cancer Cells to Antitumor Activity of ABT-263
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Small-Molecule Inhibitors of USP1 Target ID1 Degradation in Leukemic Cells
Helena Mistry, Grace Hsieh, Sara J. Buhrlage, Min Huang, Eunmi Park, Gregory D. Cuny, Ilene Galinsky, Richard M. Stone, Nathanael S. Gray, Alan D. D’Andrea, and Kalindi Parmar

Small Molecule Inhibition of PAX3-FOXO1 through AKT Activation Suppresses Malignant Phenotypes of Alveolar Rhabdomyosarcoma
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Inhibition of Wee1 Sensitizes Cancer Cells to Antimetabolite Chemotherapeutics In Vitro and In Vivo, Independent of p53 Functionality
Annemie A. Van Linden, Dmitry Baturin, James B. Ford, Susan P. Fosmire, Lori Gardner, Christopher Korch, Philip Reigan, and Christopher C. Porter

The Novel VEGF Receptor/MET– Targeted Kinase Inhibitor TAS-115 Has Marked In Vivo Antitumor Properties and a Favorable Tolerability Profile
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Targeting Plasminogen Activator Inhibitor-1 Inhibits Angiogenesis and Tumor Growth in a Human Cancer Xenograft Model
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Molecular and Biologic Analysis of Histone Deacetylase Inhibitors with Diverse Specificities

Selective Disruption of Rb–Raf-1 Kinase Interaction Inhibits Pancreatic Adenocarcinoma Growth Irrespective of Gemcitabine Sensitivity
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Christian Gieffers, Michael Kluge, Christian Merz, Jaromir Sykora, Meinolf Fischer, Marcus Branschadel, Behnaz Ahangarian Abhari, Peter Hohenberger, Simone Fulda, Harald Fricke, and Oliver Hill

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A Heterodimeric Fc-Based Bispecific Antibody Simultaneously Targeting VEGFR-2 and Met Exhibits Potent Antitumor Activity

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Long Pentraxin-3 Inhibits Epithelial-Mesenchymal Transition in Melanoma Cells

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HDAC Inhibitor Entinostat Restores Responsiveness of Letrozole-Resistant MCF-7Ca Xenografts to Aromatase Inhibitors through Modulation of Her-2

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Crizotinib, a c-Met Inhibitor, Prevents Metastasis in a Metastatic Uveal Melanoma Model

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Cytoreductive Chemotherapy Improves the Biodistribution of Antibodies Directed against Tumor Necrosis in Murine Solid Tumor Models

Julie K. Jang, Leslie A. Khawli, Ryan Park, Brian W. Wu, Zibo Li, David Canter, Peter S. Conti, and Alan L. Epstein

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Microtubule Dynamics Control Tail Retraction in Migrating Vascular Endothelial Cells

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Another Surprise from Metformin: Novel Mechanism of Action via K-Ras Influences Endometrial Cancer Response to Therapy


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IGFBP2/FAK Pathway Is Causally Associated with Dasatinib Resistance in Non-Small Cell Lung Cancer Cells

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Tunicamycin Potentiates Cisplatin Anticancer Efficacy through the DPACT1/Akt/ABCG2 Pathway in Mouse Xenograft Models of Human Hepatocellular Carcinoma

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Targeting Blockage of STAT3 in Hepatocellular Carcinoma Cells Augments NK Cell Functions via Reverse Hepatocellular Carcinoma–Induced Immune Suppression

Xiaoxia Sun, Qiangjun Sui, Cai Zhang, Zhigang Tian, and Jian Zhang

Treatment with Gefitinib or Lapatinib Induces Drug Resistance through Downregulation of Topoisomerase IIa Expression

Jaishree Bhosle, Konstantinos Xiakos, Andrew C.G. Porter, Jenny Wu, Andreas Makris, John A Hartley, and Daniel Hochhauser

Dual HER/VEGF Receptor Targeting Inhibits In Vivo Ovarian Cancer Tumor Growth

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Low Levels of Circulating Estrogen Sensitize PTEN-Null Endometrial Tumors to PARP Inhibition In Vivo

Deanna M. Janzen, Daniel Y. Paik, Miguel A. Rosales, Brian Yep, Donghui Cheng, Owen N. Witte, Huseyin Kayadibi, Christopher M. Ryan, Michael E. Jung, Kym Fuill, and Sanaz Memarzadeh

COMPANION DIAGNOSTICS AND CANCER BIOMARKERS

Molecular Predictors of Sensitivity to the Insulin-like Growth Factor 1 Receptor Inhibitor Figitumumab (CP-751,871)

Adam Pavlicek, Maruja E. Lira, Nathan V. Lee, Keith A. Ching, Jingjing Ye, Joan Cao, Scott J. Garza, Kenneth E. Hook, Mark Ozeck, Stephanie T. Shi, Jing Yuan, Xiaoxian Zheng, Paul A. Rejto, Julie L.C. Kan, and James G. Christensen

BH3 Profiling Discriminates Response to Cytarabine-Based Treatment of Acute Myelogenous Leukemia

William E. Pierceall, Steven M. Kornblau, Nicole E. Carlson, Xuelin Huang, Noel Blake, Ryan Lena, Michael Elashoff, Marina Konopleva, Michael H. Cardone, and Michael Andreeff

BRAF V600E Is a Determinant of Sensitivity to Proteasome Inhibitors

Davide Zecchin, Valentina Boscaro, Enzo Medico, Ludovic Barault, Miriam Martini, Sabrina Arena, Carlotta Cencicchiare, Alice Bartolini, Emily H. Crowley, Alberto Bardelli, Margherita Gallicchio, and Federica Di Nicolantonio

Correction: Impact of Tumor HER2/ERBB2 Expression Level on HER2-Targeted Liposomal Doxorubicin-Mediated Drug Delivery: Multiple Low-Affinity Interactions Lead to a Threshold Effect

Correction: Inhibition of Invasion, Angiogenesis, Tumor Growth, and Metastasis by Adenovirus-Mediated Transfer of Antisense uPAR and MMP-9 in Non–Small Cell Lung Cancer Cells

Acknowledgment to Reviewers

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Ovarian cancer is the deadliest gynecologic malignancy in developed countries, but progress in developing new therapies has been elusive. A novel targeted delivery system was developed by conjugating a urokinase plasminogen activator antibody with liposomal nanobins (as shown in the figure) to specifically deliver a therapeutic cargo (arsenic trioxide) into ovarian cancer cells. The targeted nanobins were efficiently internalized by cancer cells and reduced tumor burden in a xenograft model of ovarian cancer through the efficient induction of apoptosis. Urokinase system–targeted delivery of nanobins could serve as a new platform for the treatment of malignancies overexpressing urokinase, including ovarian and breast cancers. For details, see article by Zhang and colleagues, on page 2628.