## RESEARCH ARTICLES

### 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
- Hidenori Fujita, Kazutaka Miyadera, Masanori Kato, Yayoi Fujioka, Hiroaki Ochiwa, Jinhong Huang, Kimihito Ito, Yoshimi Aoyagi, Toru Takenaka, Takamasu Suzuki, Satoko Ito, Akihiro Hashimoto, Takashi Suefuji, Kosuke Egami, Hideki Kazuno, Yoshimitusu Suda, Kazuto Nishio, and Kazuhiko Yonekura

### Targeting Plasminogen Activator Inhibitor-1 Inhibits Angiogenesis and Tumor Growth in a Human Cancer Xenograft Model
- Evan Gomes-Giacoia, Makito Miyake, Steve Goodison, and Charles J. Rosser

### 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
- José G. Treviño, Monika Verma, Sandeep Singh, Smitha Pillai, Dongyu Zhang, Daniele Pernazza, Said M. Sebti, Nicholas J. Lawrence, Barbara A. Centeno, and Srikumar P. Chellappan

### 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
- Huanjie Shao, Kai Jing, Esraa Mahmoud, Haihong Huang, Xianjun Fang, and Chunrong Yu

#### Small-Molecule Inhibitors of USP1 Target ID1 Degradation in Leukemic Cells

#### Small Molecule Inhibition of PAX3–FOXO1 through AKT Activation Suppresses Malignant Phenotypes of Alveolar Rhabdomyosarcoma
- Mathivanan Jothi, Munmun Mal, Charles Keller, and Asoke K. Mal

### HIGHLIGHTS OF THIS ISSUE
- 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
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2735</td>
<td>APG350 Induces Superior Clustering of TRAIL Receptors and Shows Therapeutic Antitumor Efficacy Independent of Cross-Linking via Fc Receptors</td>
<td>Christian Gieffers, Michael Kluge, Christian Merz, Jaromir Sykora, Meinolf Thiemann, René Schaal, Carmen Fischer, Marcus Branschädler, Behnaz Ahammadian Abhari, Peter Hohenberger, Simone Fulda, Harald Fricke, and Oliver Hill</td>
</tr>
<tr>
<td>2748</td>
<td>A Heterodimeric Fc-Based Bispecific Antibody Simultaneously Targeting VEGFR-2 and Met Exhibits Potent Antitumor Activity</td>
<td>Hye-Ji Choi, Ye-Jin Kim, Sangho Lee, and Yong-Sung Kim</td>
</tr>
<tr>
<td>2760</td>
<td>Long Pentraxin-3 Inhibits Epithelial–Mesenchymal Transition in Melanoma Cells</td>
<td>Roberto Ronca, Emanuela Di Salle, Arianna Giacomini, Daria Leali, Patrizia Alessi, Daniela Coltrini, Cosetta Ravelli, Sara Matarazzolo, Domenico Ribatti, William Vermi, and Marco Presta</td>
</tr>
<tr>
<td>2772</td>
<td>Sym004, a Novel Anti-EGFR Antibody Mixture, Augments Radiation Response in Human Lung and Head and Neck Cancers</td>
<td>Shyhmin Huang, Chimera R. Peet, Jarob Saker, Chunrong Li, Eric A. Armstrong, Michael Kragh, Mikkel W. Pedersen, and Paul M. Harari</td>
</tr>
<tr>
<td>2782</td>
<td>ATP Citrate Lyase Mediates Resistance of Colorectal Cancer Cells to SN38</td>
<td>Yunfei Zhou, Lakshmi Reddy Bollu, Federico Tozzi, Xiangzang Ye, Rajat Bhattacharya, Guang Gao, Elizabeth Dupro, Ling Xia, Jia Lu, Fan Fan, Seth Bellister, Lee M. Ellis, and Zhang Weihua</td>
</tr>
<tr>
<td>2792</td>
<td>Redirecting Apoptosis to Aponecrosis Induces Selective Cytotoxicity to Pancreatic Cancer Cells through Increased ROS, Decline in ATP Levels, and VDAC</td>
<td>Richard D. Dinnen, Yuehua Mao, Wanglong Qiu, Nicholas Cassai, Vesna N. Slavkovich, Gwen Nichols, Gloria H. Su, Paul Brandt-Rauf, and Robert L. Fine</td>
</tr>
<tr>
<td>2804</td>
<td>HDAC Inhibitor Entinostat Restores Responsiveness of Letrozole-Resistant MCF-7Ca Xenografts to Aromatase Inhibitors through Modulation of Her-2</td>
<td>Gauri J. Sabnis, Olga G. Goloubeva, Armina A. Kazi, Preeti Shah, and Angela H. Brodie</td>
</tr>
<tr>
<td>2804</td>
<td>Cytoreductive Chemotherapy Improves the Biodistribution of Antibodies Directed against Tumor Necrosis in Murine Solid Tumor Models</td>
<td>Julie K. Jang, Leslie A. Khawli, Ryan Park, Brian W. Wu, Zibo Li, David Canter, Peter S. Conti, and Alan L. Epstein</td>
</tr>
<tr>
<td>2804</td>
<td>Target-Based Therapeutic Matching in Early-Phase Clinical Trials in Patients with Advanced Colorectal Cancer and PIK3CA Mutations</td>
<td>Prasanth Ganesan, Filip Janku, Aung Naing, David S. Hong, Apostolos M. Tsimberidou, Gerald S. Falchook, Jennifer J. Wheler, Sarina A. Piha-Paul, Siqing Fu, Vanda M. Stepanek, J. Jack Lee, Rajyalakshmi Luthra, Michael J. Overman, E. Scott Kopetz, Robert A. Wolff, and Razelle Kurzrock</td>
</tr>
</tbody>
</table>
Tunicamycin Potentiates Cisplatin Anticancer Efficacy through the DPACT1/Akt/ABCG2 Pathway in Mouse Xenograft Models of Human Hepatocellular Carcinoma

Helei Hou, Hefen Sun, Ping Lu, Chao Ge, Lixing Zhang, Hong Li, Fangyu Zhao, Hua Tian, Lin Zhang, Taoyang Chen, Ming Yao, and Jinjun Li

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 IIα Expression

Jaishree Bhosle, Konstantinos Kiakos, 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

Marc A. Becker, Thahir Farzan, Sean C. Harrington, James W. Krempski, S. John Weroha, Xiaonan Hou, Kimberly R. Kalli, Tai W. Wong, and Paul Haluska

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

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

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, Xianxian Zheng, Paul A. Rejto, Julie L.C. Kan, and James G. Christensen

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, Xianxian Zheng, Paul A. Rejto, Julie L.C. Kan, and James G. Christensen

AC icon indicates Author Choice

For more information please visit www.aacrjournals.org
ABOUT THE COVER

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.