THERAPEUTIC DISCOVERY

2311 Targeting Protein Tyrosine Kinase 6 Enhances Apoptosis of Colon Cancer Cells following DNA Damage
Jessica J. Gierut, Priya S. Mathur, Wenjun Bie, Jin Han, and Angela L. Tyner

2321 Sangivamycin-like Molecule 6 Exhibits Potent Anti-Multiple Myeloma Activity through Inhibition of Cyclin-Dependent Kinase-9
Nathan C. Dolloff, Joshua E. Allen, David T. Dicker, Nicole Aqui, Dan Vogl, Jozef Malezyk, Giampaolo Talamo, and Wafik S. El-Deiry

2331 In Situ Vaccination with CD204 Gene-Silenced Dendritic Cell, not Unmodified Dendritic Cell, Enhances Radiation Therapy of Prostate Cancer
Chunqing Guo, Huanfa Yi, Xiaofei Yu, Daming Zuo, Jie Qian, Gary Yang, Barbara A. Foster, John R. Subjeck, Xiaolei Sun, Ross B. Mikkelson, Paul B. Fisher, and Xiang-Yang Wang

2342 Inhibition of Monocarboxylate Transporter 2 Induces Senescence-Associated Mitochondrial Dysfunction and Suppresses Progression of Colorectal Malignancies In Vivo
Inkyoung Lee, Sook-Ja Lee, Won Ki Kang, and Chaehwa Park

Samy A.F. Morad, Jonathan C. Levin, Sriram S. Shanmugavelandy, Mark Kester, Gemma Fabrias, Carmen Bedia, and Myles C. Cabot

2362 Smoking Induces Epithelial-to-Mesenchymal Transition in Non-Small Cell Lung Cancer through HDAC-Mediated Downregulation of E-Cadherin
Nagaraj S. Nagathihalli, Pierre P. Massion, Adriana L. Gonzalez, Pengcheng Lu, and Pran K. Datta

Breakdown of the FLT3-ITD/STAT5 Axis and Synergistic Apoptosis Induction by the Histone Deacetylase Inhibitor Panobinostat and FLT3-Specific Inhibitors
Kristin Pietschmann, Hella Anna Bolck, Marc Buchwald, Steffi Spielberg, Harald Polzer, Karsten Spiekermann, Gesine Bug, Thorsten Heinzel, Frank-Dietmar Bohmer, and Oliver H. Krämer

Loss of the Malignant Phenotype of Human Neuroblastoma Cells by a Catalytically Inactive Dominant-Negative hTERT Mutant
Mona Samy, Charles-Henry Gattolliat, Frédéric Pendino, Josette Hillion, Eric Nguyen, Sophie Bombard, Sétha Douc-Rasy, Jean Bénard, and Evelyne Ségal-Bendirdjian

Mechanism of Drug Efficacy Within the EGF Receptor Revealed by Microsecond Molecular Dynamics Simulation
Shunzhou Wan, David W. Wright, and Peter V. Coveney

Deficient DNA Damage Signaling Leads to Chemoresistance to Cisplatin in Oral Cancer
Ling Wang, Adam J. Mosel, Gregory G. Oakley, and Ainmin Peng

MicroRNA Regulation of Oncolytic Adenovirus 6 for Selective Treatment of Castration-Resistant Prostate Cancer
Zhenwei Zhang, Xuemei Zhang, Kam Newman, and Xinyuan Liu

PRECLINICAL DEVELOPMENT

2419 Selective Targeting of Interferon γ to Stromal Fibroblasts and Pericytes as a Novel Therapeutic Approach to Inhibit Angiogenesis and Tumor Growth
Ruchi Bansal, Tushar Tomar, Arne Östman, Klaas Poelstra, and Jai Prakash

2429 Inhibition of TGF-β Enhances the In Vivo Antitumor Efficacy of EGF Receptor–Targeted Therapy
Atul Bedi, Xiaofei Chang, Kimberly Noonan, Vui Pham, Rishi Bedi, Elana J. Fertig, Michael Considine, Joseph A. Califano, Ivan Borrello, Christine H. Chung, David Sidransky, and Rajani Ravi
O(6)-Methylguanine-DNA Methyltransferase Is a Novel Negative Effector of Invasion in Glioblastoma Multiforme
Manik Chahal, Bassam Abdulkarim, Yaoxian Xu, Marie-Chritine Guiot, Jacob C. Easaw, Nicolas Stifani, and Siham Sabri

Humanization of an Anti-CCR4 Antibody That Kills Cutaneous T-Cell Lymphoma Cells and Abrogates Suppression by T-Regulatory Cells
De-Kuan Chang, Jianhua Sui, Shusheng Geng, Asli Muwaffak, Mei Bai, Robert C. Fuhlbrigge, Agnes Lo, Anuradha Yammanuru, Luke Hubbard, Jared Sheehan, James J. Campbell, Quan Zhu, Thomas S. Kupper, and Wayne A. Marasco

Perillyl Alcohol for the Treatment of Temozolomide-Resistant Gliomas

Stromal Platelet-Derived Growth Factor Receptor α (PDGFRα) Provides a Therapeutic Target Independent of Tumor Cell PDGFRα Expression in Lung Cancer Xenografts
David E. Gerber, Puja Gupta, Michael T. Dellinger, Jason E. Toombs, Michael Peyton, Inga Duignan, Jennifer Malaby, Timothy Bailey, Colleen Burns, Rolf A. Brekken, and Nick Loizos

Mechanistic Basis for Overcoming Platinum Resistance Using Copper Chelating Agents

8-Amino-Adenosine Activates p53-Independent Cell Death of Metastatic Breast Cancers
Alla Polotskaia, Sandy Hoffman, Nancy L. Krett, Mala Shamugam, Steven T. Rosen, and Jill Bargonetti

Synthetic Lethal Screening with Small-Molecule Inhibitors Provides a Pathway to Rational Combination Therapies for Melanoma
Devin G. Roller, Mark Axelrod, Brian J. Capaldo, Karin Jensen, Aaron Mackey, Michael J. Weber, and Daniel Giroel

A Locked, Dimeric CXCL12 Variant Effectively Inhibits Pulmonary Metastasis of CXCR4-Expressing Melanoma Cells Due to Enhanced Serum Stability
Tomonori Takeda, Joshua J. Ziarek, Brian F. Volkman, and Sam T. Hwang

Epithelial–Mesenchymal Transition and Stem Cell Markers in Patients with HER2-Positive Metastatic Breast Cancer

Response to Erlotinib in Patients with EGFR Mutant Advanced Non–Small Cell Lung Cancers with a Squamous or Squamous-like Component
Paul K. Paik, Anna M. Varghese, Camelia S. Sima, Andre L. Moreira, Marc Ladanyi, Mark G. Kris, and Natasha Rekhtman

Targeting the Apoptotic Pathway in Chondrosarcoma Using Recombinant Human Apo2L/TRAIL (Dulanermin), a Dual Proapoptotic Receptor (DR4/DR5) Agonist
Vivek Subbiah, Robert E. Brown, Jamie Buryanek, Jonathan Trent, Avi Ashkenazi, Roy Herbst, and Razelle Kurzrock

MOLECULAR MEDICINE IN PRACTICE

SPOTLIGHTS ON CLINICAL RESPONSE
ABOUT THE COVER

May-Grünwald-Giemsa staining of IGR-N-91 neuroblastoma cells transduced with a dominant-negative (DN) variant of the catalytic subunit of the human telomerase (hTERT). Despite the use of high dose chemotherapy, stage 4 neuroblastoma patients have a dismal outcome, showing a need of new therapeutic approaches in these patients. A new link between telomerase biology and malignant neuroblast cell fate is discovered. Indeed, DN-hTERT transduction in a stage 4 neuroblastoma cell line promotes a switch from a neuronal to a substrate adherent phenotype and regulates key genes, leading to the loss of the malignant behavior of neuroblasts, thereby sensitizing them to anticancer drugs. Therefore, this finding has important implications in the development of novel strategies for neuroblastoma therapeutic management. For details, see article by Samy and colleagues on page 2384.