Highlights of This Issue 2475

REVIEW

2477 Suppression of Feedback Loops Mediated by PI3K/mTOR Induces Multiple Overactivation of Compensatory Pathways: An Unintended Consequence Leading to Drug Resistance
Enrique Rozengurt, Heloisa P. Soares, and James Sinnet-Smith

SMALL MOLECULE THERAPEUTICS

2489 Delineating the mTOR Kinase Pathway Using a Dual TORC1/2 Inhibitor, AZD8055, in Multiple Myeloma
Diana Cirstea, Loredana Santo, Teru Hideshima, Homare Eda, Yuko Mishima, Neelahika Nemani, Anuj Mahindra, Andrew Yee, Gullu Gorgun, Yugu Hu, Hiroto Ohguchi, Rikio Suzuki, Francesca Cottini, Sylvie M. Guichard, Kenneth C. Anderson, and Noopur Raje

2501 Dual Targeting of Hypoxia and Homologous Recombination Repair Dysfunction in Triple-Negative Breast Cancer
Francis W. Hunter, Huai-Ling Hsu, Jiechuang Su, Susan M. Pullen, William R. Wilson, and Jingli Wang

2515 Novel Selective Estrogen Mimics for the Treatment of Tamoxifen-Resistant Breast Cancer
Mary Ellen Molloy, Bethany E. Perez White, Teshome Gherezghiher, Bradley T. Michalsen, Rui Xiong, Hitisha Patel, Huiping Zhao, Philipp P. Maximov, V. Craig Jordan, Gregory R.J. Thatcher, and Debra A. Tonetti

2527 Pazopanib, a Novel Multitargeted Kinase Inhibitor, Shows Potent In Vitro Antitumor Activity in Gastric Cancer Cell Lines with FGFR2 Amplification
Seung Tae Kim, Hye-Lim Jang, Su Jin Lee, Jeeyun Lee, Yoon-La Choi, Kyoung-Mee Kim, Jeonghee Cho, Se Hoon Park, Young Suk Park, Ho Yeong Lim, Masakazu Yashiro, Won Ki Kang, and Joon Oh Park

2537 Small Molecule BMH-Compounds That Inhibit RNA Polymerase I and Cause Nucleolar Stress
Karita Peltonen, Laureen Colis, Hester Liu, Sari Jaamoa, Zhewei Zhang, Taija af Hallstrom, Henna M. Moore, Paul Sirajuddin, and Marikki Laiho

2547 The Fibroblast Growth Factor Receptor Genetic Status as a Potential Predictor of the Sensitivity to CH5183284/Debio 1347, a Novel Selective FGFR Inhibitor
Yoshito Nakanishi, Nukinori Akiyama, Toshiyuki Tsukaguchi, Toshihiko Fujii, Kiyoaki Sakata, Hitoshi Sase, Takehito Isobe, Kenji Morikami, Hidetoshi Shindoh, Toshiyuki Mio, Hirosato Ebiike, Naoki Taka, Yuko Araki, and Nobuya Ishii

2559 Monensin Inhibits Epidermal Growth Factor Receptor Trafficking and Activation: Synergistic Cytotoxicity in Combination with EGFR Inhibitors
Khalil Dayekh, Stephanie Johnson-Obaseki, Martin Corsten, Patrick J. Villeneuve, Harmanjitinder S. Sekhon, Johnna I. Weberpals, and Jim Dimitroulakos

2572 Targeted Silencing of MLL5 Inhibits Tumor Growth and Promotes Gamma-Irradiation Sensitization in HPV16/18-Associated Cervical Cancers
Dawn Sijin Nin, Chow Wenn Yew, Sun Kuie Tay, and Lih-Wen Deng

2583 Bisphosphonates Inhibit Stellate Cell Activity and Enhance Antitumor Effects of Nanoparticle Albumin–Bound Paclitaxel in Pancreatic Ductal Adenocarcinoma

2595 Development of Targeted Near-Infrared Imaging Agents for Prostate Cancer
Xinning Wang, Steve S. Huang, Warren D.W. Heston, Hong Guo, Bing-Cheng Wang, and James P. Basilion

November 2014 · Volume 13 · Number 11

Molecular Cancer Therapeutics

Table of Contents
MODELS AND TECHNOLOGIES

2751 Identification of Kinase Inhibitor Targets in the Lung Cancer Microenvironment by Chemical and Phosphoproteomics
Manuela Gridling, Scott B. Ficarro, Florian P. Breitwieser, Lanxi Song, Katja Parapatics, Jacques Colinge, Eric B. Haura, Jarrod A. Marto, Giulio Superti-Furga, Keiryn L. Bennett, and Uwe Rix

LETTERS TO THE EDITOR

2763 PDT with a Glucose-Conjugated Chlorin for GIST—Letter
Mark Linch and Andrew J. Hayes

CORRECTION

2765 Correction: The Aurora Kinase A Inhibitor MLN8237 Enhances Cisplatin-Induced Cell Death in Esophageal Adenocarcinoma Cells

ABOUT THE COVER

Interrelation between vasculature, blood flow, proliferation, and hypoxia is shown in an HCT116 tumor xenograft 24 hours following irinotecan treatment. Irinotecan initially halts proliferation throughout the tissue but by 24 hours the S-phase fraction returns to near-control levels. The image was produced using multiplexed immunohistochemistry to illustrate the effects of drugs in the context of the tumor microenvironment. Greyscale images of the individual staining patterns were coregistered to produce the composite image shown here. HCT116 xenografts exhibit a corded architecture, where sheaths of tumor cells can be seen to surround individual vessels. Cells can survive to ~150 m away from the blood vessels but become increasingly oxygen-deprived and eventually necrose. For details, see the article by Kyle and colleagues on page 2727.