Contents

Highlights of This Issue  391

SPECIAL FEATURES

CCR Translations

393  Response to Combined Molecular Targeting: Defining the Role of P-STAT3
Ann Marie Egloff and Jennifer R. Grandis
See article p. 483

CCR New Strategies

396  New Strategies in Acute Lymphoblastic Leukemia: Translating Advances in Genomics into Clinical Practice
Charles G. Mullighan

Molecular Pathways

401  Tumor Suppressor CHK2: Regulator of DNA Damage Response and Mediator of Chromosomal Stability
Aline Stolz, Norman Ertych, and Holger Bastians

Review

406  Drug Transporters and Imatinib Treatment: Implications for Clinical Practice

HUMAN CANCER BIOLOGY

416  Comprehensive Mapping of p53 Pathway Alterations Reveals an Apparent Role for Both SNP309 and MDM2 Amplification in Sarcomagenesis
Moriko Ito, Louise Barys, Terence O’Reilly, Sophie Young, Bella Gorbatcheva, John Monahan, Sabine Zumstein-Mecker, Peter F. Choong, Ian Dickinson, Philip Crowe, Christine Hemmings, Jayesh Desai, David M. Thomas, and Joanna Lisztwan

427  Expression and Functional Significance of HtrA1 Loss in Endometrial Cancer
Sally A. Mullaney, Mehdi Moslemi-Kebrlia, Ramandeep Rattan, Ashwani Khurana, Amy Clayton, Takayo Ota, Andrea Mariani, Karl C. Podratz, Jeremy Chien, and Vijji Shridhar

437  Endogenous Versus Tumor-Specific Host Response to Breast Carcinoma: A Study of Stromal Response in Synchronous Breast Primaries and Biopsy Site Changes
Julie M. Wu, Andrew H. Beck, Lisa L. Pate, Daniela Witten, Shirley X. Zhu, Kelli D. Montgomery, Kimberly H. Allison, Matt van de Rijn, and Robert B. West

CANCER THERAPY: PRECLINICAL

447  Vandetanib Improves Anti-Tumor Effects of L19mTNFα in Xenograft Models of Esophageal Cancer
Marika Crescenzi, Luca Persano, Giovanni Esposito, Elisabetta Zulato, Laura Bors, Enrica Balza, Alberto Ruol, Ermanno Ancona, Stefano Indraccolo, and Alberto Amadori

459  Targeting the Urokinase Plasminogen Activator Receptor Inhibits Ovarian Cancer Metastasis
Hilary A. Kenny, Payton Leonhardt, Andras Ladanayi, S. Diane Yamada, Anthony Montag, Hae Kyung Im, Sujatha Jagadeeswaram, David E. Shaw, Andrew P. Mazar, and Ernst Lengyel
HGF Rescues Colorectal Cancer Cells from EGFR Inhibition via MET Activation
David Liska, Chin-Tung Chen, Thomas Bachleitner-Hofmann, James G. Christensen, and Martin R. Weiser

Combined Blockade of Src Kinase and Epidermal Growth Factor Receptor with Gemcitabine Overcomes STAT3-Mediated Resistance of Inhibition of Pancreatic Tumor Growth
Nagathihalli S. Nagaraj, M. Kay Washington, and Nipun B. Merchant
See commentary p. 393

Nutlin-3a Is a Potential Therapeutic for Ewing Sarcoma
Kathleen I. Pishas, Fares Al-Ejeh, Irene Zinonos, Raman Kumar, Andreas Evdokiou, Michael P. Brown, David F. Callen, and Paul M. Neilsen

Notch Pathway Inhibition Significantly Reduces Rhabdomyosarcoma Invasiveness and Mobility In Vitro
Josep Roma, Anna Masià, Jaume Reventós, Josep Sánchez de Toledo, and Soledad Gallego

Distinct Interactions Between c-Src and c-Met in Mediating Resistance to c-Src Inhibition in Head and Neck Cancer
Banibrata Sen, Shaohua Peng, Babita Saigal, Michelle D. Williams, and Faye M. Johnson

Forkhead Transcription Factor FOXO1 is a Direct Target of Progestin to Inhibit Endometrial Epithelial Cell Growth
Satoru Kyo, Junko Sakaguchi, Tohru Kiyono, Yutaka Shimizu, Yoshiko Maida, Yasunari Mizumoto, Noriko Mori, Mitsuhiro Nakamura, Masahiro Takakura, Kiyohiko Miyake, Masaru Sakamoto, and Masaki Inoue

Conditionally Replicating Adenovirus Expressing TIMP2 for Ovarian Cancer Therapy

Longitudinal Investigation of Permeability and Distribution of Macromolecules in Mouse Malignant Transformation using PET
Cecilie B. Rygh, Shengping Qin, Jai W. Seo, Lisa M. Mahakian, Hua Zhang, Roger Adamson, Jane Q. Chen, Alexander D. Borowsky, Robert D. Cardiff, Rolf K. Reed, Fitz-Roy E. Curry, and Katherine W. Ferrara

Cancer Therapy Associated Bone Loss: Implications for Hip Fractures in Mid-Life Women with Breast Cancer
Beatrice J. Edwards, Dennis W. Raisch, Veena Shankaran, June M. McKoy, William Gradishar, Andrew D. Bunta, Athena T. Samaras, Simone N. Boyle, Charles L. Bennett, Dennis P. West, and Theresa A. Guise

A Pharmacodynamic Study of Docetaxel in Combination with the P-glycoprotein Antagonist Tariquidar (XR9576) in Patients with Lung, Ovarian, and Cervical Cancer

A Phase I Study of the Combination of Intravenous Reovirus Type 3 Dearing and Gemcitabine in Patients with Advanced Cancer
Martijn P. Lolkema, Hendrik-Tobias Arkenau, Kevin Harrington, Patricia Roxburgh, Rosemary Morrison, Victoria Roulstone, Katie Twigger, Matt Coffey, Karl Mettinger, George Gill, T.R. Jeffry Evans, and Johann S. de Bono

Phase 1 Study of Valproic Acid in Pediatric Patients with Refractory Solid or CNS Tumors: A Children’s Oncology Group Report
Jack M. Su, Xiao-Nan Li, Patrick Thompson, Ching-Nan Ou, Ashish M. Ingle, Heidi Russell, Ching C. Lau, Peter C. Adamson, and Susan M. Blaney
Modulation of Genetic and Epigenetic Biomarkers of Colorectal Cancer in Humans by Black Raspberries: A Phase I Pilot Study
Li-Shu Wang, Mark Arnold, Yi-Wen Huang, Christine Sardo, Claire Seguin, Edward Martin, Tim H.-M. Huang, Ken Riedl, Steven Schwartz, Wendy Frankel, Dennis Pearl, Yiqing Xu, John Winston III, Guang-Yu Yang, and Gary Stoner

Pharmacokinetically Guided Phase I Trial of the IGF-1 Receptor Antagonist RG1507 in Children with Recurrent or Refractory Solid Tumors
Rochelle Bagatell, Cynthia E. Herzog, Tanya M. Trippett, Joseph F. Grippo, Georgina Cirrincione-Dall, Elizabeth Fox, Margaret Macy, Jennifer Bish, Patricia Whitcomb, Alberta Aiken, Gerry Wright, Sergey Yurasov, Frank M. Balis, and Lia Gore

PREDICTIVE BIOMARKERS AND PERSONALIZED MEDICINE

Genetic Polymorphisms Associated with a Prolonged Progression-Free Survival in Patients with Metastatic Renal Cell Cancer Treated with Sunitinib
Astrid A.M. van der Veldt, Karel Eechoute, Hans Gelderblom, Jourik Gietema, Henk-Jan Guchelaar, Nielska P. van Erp, Alfons J.M. van den Eertwegh, John B. Haanen, Ron H.J. Mathijssen, and Judith A.M. Wessels

CORRECTIONS

Correction: Bevacizumab plus Fotemustine as First-line Treatment in Metastatic Melanoma Patients: Clinical Activity and Modulation of Angiogenesis and Lymphangiogenesis Factors

Correction: In vitro and Clinical Studies of Gene Therapy with Recombinant Human Adenovirus-p53 Injection for Oral Leukoplakia

ABOUT THE COVER

Rapid restoration of tumor microvasculature and perfusion in esophageal cancer xenografts treated with a vascular disrupting agent. Kyse-30 tumors were analyzed two weeks after administration of one single dose of the immunoconjugate L19mTNFa. Microvessels were stained by anti-CD31 (red), whereas perfusion was evaluated by injection of Dextran-FITC 70 kDa (green). Nuclei were stained by TOPRO-3 (blue). For further details, please see Crescenzi and coworkers on page 447 in this issue.