SPECIAL FEATURES

Introducing New Strategies in…
James L. Abbruzzese,
Alexander M.M. Eggermont, and Eric H. Rubin

New Strategies in Kidney Cancer:
Therapeutic Advances through Understanding the Molecular Basis of Response and Resistance
Brian I. Rini

Does Lapatinib Work against HER2-negative Breast Cancers?
Ingrid A. Mayer and Carlos L. Arteaga

Testing Clonal Relatedness of Tumors Using Array Comparative Genomic Hybridization: A Statistical Challenge
Irina Ostrovnaya and Colin B. Begg

Everolimus
Peter J. Houghton

HER3 Comes of Age: New Insights into Its Functions and Role in Signaling, Tumor Biology, and Cancer Therapy
Marcia R. Campbell, Dhara Amin, and Mark M. Moasser

Cyclooxygenase-2 and Cancer Treatment: Understanding the Risk Should Be Worth the Reward
David G. Menter, Richard L. Schilsky, and Raymond N. DuBois

HUMAN CANCER BIOLOGY

High-Resolution Array Comparative Genomic Hybridization in Sporadic and Celiac Disease–Related Small Bowel Adenocarcinomas
Begoña Diosdado, Tineke E. Buffart, Russell Watkins, Beatriz Carvalho, Bauke Ylstra, Marianne Tijssen, Anne S. Bølin, Fraser Lewis, Karen Maude, Caroline Verbeke, Iris D. Nagtegaal, Heike Grabsch, Chris J.J. Mulder, Phil Quirk, Peter Howdle, and Gerrit A. Meijer

Critical Role of Gα13 and Gα13 for Human Small Cell Lung Cancer Cell Proliferation In vitro and Tumor Growth In vivo
Marius Grzelinski, Olaf Pinkenburg, Thomas Büch, Maike Gold, Stefanie Stohr, Hermann Kalwa, Thomas Gudermann, and Achim Aigner

Association of TGF-β1 Genetic Variants with HPV16-positive Oropharyngeal Cancer
Xiaoxiang Guan, Erich M. Sturgis, Dapeng Lei, Zhensheng Liu, Kristina R. Dahlstrom, Qingyi Wei, and Guojun Li

ZIP4 Regulates Pancreatic Cancer Cell Growth by Activating IL-6/STAT3 Pathway through Zinc Finger Transcription Factor CREB
Yuqing Zhang, Uddalak Bharadwaj, Craig D. Logsdon, Changyi Chen, Qizhi Yao, and Min Li

Neuroblastoma Progression Correlates with Downregulation of the Lymphangiogenesis Inhibitor sVEGFR-2
Jürgen Becker, Helena Pavlakovic, Fabian Ludewig, Fabiola Wilting, Herbert A. Weich, Romulo Albuquerque, Jayakrishna Ambati, and Jörg Wilting
### CANCER THERAPY: PRECLINICAL

1442 | Patient-Derived First Generation Xenografts of Non–Small Cell Lung Cancers: Promising Tools for Predicting Drug Responses for Personalized Chemotherapy  
Xin Dong, Jun Guan, John C. English, Julia Flint, John Yee, Kenneth Evans, Nevin Murray, Calum MacAulay, Raymond T. Ng, Peter W. Gout, Wan L. Lam, Janessa Laskin, Victor Ling, Stephen Lam, and Yuzhuo Wang

1452 | Comparative Profiling of the Novel Epothilone, Sagopilone, in Xenografts Derived from Primary Non–Small Cell Lung Cancer  
Stefanie Hammer, Anette Sommer, Iduna Fichtner, Michael Becker, Jana Rolff, Johannes Merk, Ulrich Klar, and Jens Hoffmann

1466 | An Adenoviral Vaccine Encoding Full-Length Inactivated Human Her2 Exhibits Potent Immunogenicity and Enhanced Therapeutic Efficacy without Oncogenicity  
Zachary Hartman, Junping Wei, Takuya Osada, Oliver Class, Gangjun Lei, Xiao-Yi Yang, Sharon Peplinski, Dong-Wan Kim, Wenle Xia, Neil Specter, Jeffrey Marks, William Barry, Amy Hobieka, Gayathri Devi, Andrea Amalfitano, Michael A. Morse, H. Kim Lyerly, and Timothy M. Clay

1478 | Lestaurnitbin Enhances the Antitumor Efficacy of Chemotherapy in Murine Xenograft Models of Neuroblastoma  
Radhika Iyer, Audrey E. Evans, Xiaoxue Qi, Ruth Ho, Jane E. Minturn, Huaqing Zhao, Naomi Balamuth, John M. Maris, and Garrett M. Brodeur

1486 | Lapatinib Restores Hormone Sensitivity with Differential Effects on Estrogen Receptor Signaling in Cell Models of Human Epidermal Growth Factor Receptor 2–Negative Breast Cancer with Acquired Endocrine Resistance  

1498 | Preclinical Investigation of PEGylated Tumor Necrosis Factor α in Dogs with Spontaneous Tumors: Phase 1 Evaluation  
Douglas H. Thamm, Ilene D. Kurzman, Mike A. Clark, E.J. Ehrhart III, Susan L. Kraft, Daniel L. Gustafson, and David M. Vail

### IMAGING, DIAGNOSIS, PROGNOSIS

1509 | Lapatinib, a Dual EGFR and HER2 Kinase Inhibitor, Selectively Inhibits HER2-Amplified Human Gastric Cancer Cells and is Synergistic with Trastuzumab In vitro and In vivo  
Zev A. Wainberg, Adrian Anghel, Amrita J. Desai, Raul Ayala, Tong Luo, Brent Safran, Marlena S. Fejzo, J. Randolph Hecht, Dennis J. Slamon, and Richard S. Finn

1520 | Defucosylated Humanized Anti-CCR4 Monoclonal Antibody KW-0761 as a Novel Immunotherapeutic Agent for Adult T-cell Leukemia/Lymphoma  
Toshihiko Ishii, Takashi Ishida, Atae Utsunomiya, Atsushi Inagaki, Hiroki Yano, Hirokazu Komatsu, Shinsuke Iida, Kazunori Imada, Takashi Uchiyama, Shiro Akinaga, Kenya Shitara, and Ryuzo Ueda

1532 | Accurate Outcome Prediction in Neuroblastoma across Independent Data Sets Using a Multigene Signature  
Kathleen De Preter, Joëlle Vermeulen, Benedikt Brors, Olivier Delattre, Angelika Eggert, Matthias Fischer, Isabelle Janoueix-Lerosey, Cinzia Laravino, John M. Maris, Jaume Mora, Akira Nakagawa, André Obertuer, Miki Ohira, Gudrun Schleiermacher, Alexander Schramm, Johannes H. Schulte, Qun Wang, Frank Westermann, Frank Speleman, and Jo Vandesompele

1542 | Evaluation of Treatment-Associated Inflammatory Response on Diffusion-Weighted Magnetic Resonance Imaging and 2-[18F]-Fluoro-2-Deoxy-D-Glucose-Positron Emission Tomography Imaging Biomarkers  

1553 | Low Level Her2 Overexpression Is Associated with Rapid Tumor Cell Proliferation and Poor Prognosis in Prostate Cancer  
Sarah Minner, Birte Jessen, Lars Stiedenroth, Eike Burandt, Jens Köllermann, Martina Mirlacher, Markus Graefen, Hartwig Huland, Guido Sauter, and Thorsten Schlomm
A Novel, Highly Sensitive Antibody Allows for the Routine Detection of ALK-Rearranged Lung Adenocarcinomas by Standard Immunohistochemistry

Evaluation of the ETS-Related Gene mRNA in Urine for the Detection of Prostate Cancer

Melanoma MicroRNA Signature Predicts Post-Recurrence Survival

Development of Immunohistochemistry Assays to Assess GALNT14 and FUT3/6 in Clinical Trials of Dulanermin and Drozitumab
Howard M. Stern, Mary Padilla, Klaus Wagner, Lukas Amler, and Avi Ashkenazi

IDH1 and IDH2 Mutations Are Prognostic but not Predictive for Outcome in Anaplastic Oligodendrogial Tumors: A Report of the European Organization for Research and Treatment of Cancer Brain Tumor Group
Martin J. van den Bent, Hendrikus J. Dubbink, Yannick Marie, Alba A. Brandes, Martin J.B. Taphoorn, Pieter Wesseling, Marc Frenay, Coes C. Tijsen, Denis Lacombe, Ahmed Idsbaai, Ronald van Marion, Johan M. Kros, Winand N.M. Dinjens, Thierry Gorlia, and Marc Sanson

Cyclooxygenase-2 Inhibition Does Not Improve the Reduction in Ductal Carcinoma In situ Proliferation with Aromatase Inhibitor Therapy: Results of the ERISAC Randomized Placebo-Controlled Trial

The First-in-Human Study of the Hydrogen Sulfate (Hyd-Sulfate) Capsule of the MEK1/2 Inhibitor AZD6244 (ARRY-142886): A Phase I Open-Label Multicenter Trial in Patients with Advanced Cancer

Estrogen Receptor-α Phosphorylation at Serine 305, Nuclear p21-Activated Kinase 1 Expression, and Response to Tamoxifen in Postmenopausal Breast Cancer
Josefine Becker, Lambert Skaar, Tommy Fonander, Bo Nordenskjöld, and Olle Stål

A Phase II Clinical Trial of Ixabepilone (Ixempra; BMS-247550; NSC 710428), an Epothilone B Analog, in Patients with Metastatic Renal Cell Carcinoma
Hui Huang, Michael Menez, Maureen Edgerly, Sen Zhuang, Herb Kotz, Marianne Poruchynsky, Lynn Mickley Huff, Susan Bates, and Tito Fojo

Diverse Patterns of T-Cell Response against Multiple Newly Identified Human Y Chromosome–Encoded Minor Histocompatibility Epitopes
Yishai Ofran, Haesook T. Kim, Vladimir Brusic, Loren Blake, Michael Mandrell, Catherine J. Wu, Stefanie Sarantopoulos, Roberto Bellucci, Derin B. Reskin, Robert J. Soiffer, Joseph H. Antin, and Jerome Ritz
The featured image is a lung adenocarcinoma stained with a novel, highly sensitive and specific antibody recognizing the ALK oncoprotein (brown staining) and counterstained with hematoxylin (blue staining). The tumor was shown to harbor a rearrangement of the ALK locus by genetic analysis. This assay will facilitate the routine identification of ALK-rearranged lung adenocarcinomas in clinical practice and detect lung cancers that may be responsive to ALK inhibitors. For details, see the article by Mino-Kenudson and colleagues on page 1561 of this issue.