Contents

Highlights of This Issue vii

SPECIAL FEATURES

1085 Finding the Right Dose for Cancer Therapeutics—Can We Do Better?
Eric H. Rubin and Keaven M. Anderson
See article p. 1289

1088 Targeting the Cytoprotective Chaperone, Clusterin, for Treatment of Advanced Cancer
Amina Zoubeidi, Kim Chi, and Martin Gleave

1094 Targeting the RB-pathway in Cancer Therapy
Erik S. Knudsen and Jean Y.J. Wang

1100 A New Therapy Paradigm for Prostate Cancer Founded on Clinical Observations
Eleni Efstrapoti and Christopher J. Logothetis

Molecular Pathways

1108 High Frequency of p53/MDM2/p14ARF Pathway Abnormalities in Relapsed Neuroblastoma

1119 Frequent Downregulation of miR-34 Family in Human Ovarian Cancers

HUMAN CANCER BIOLOGY

1129 Comprehensive MicroRNA Profiling for Head and Neck Squamous Cell Carcinomas
Angela R.Y. Hui, Michelle Lenarduzzi, Tiffaney Krushel, Levi Waldron, Melania Pintilie, Wei Shi, Bayardo Perez-Ordonez, Igor Jurisica, Brian O'Sullivan, John Waldron, Pat Gullane, Bernard Cummings, and Fei-Fei Liu

1140 X-Linked Ectodermal Dysplasia Receptor Is Downregulated in Breast Cancer via Promoter Methylation
Vasu Punj, Hitu Matta, and Preet M. Chaudhary

CANCER THERAPY: PRECLINICAL

1149 Dasatinib Inhibits the Growth of Molecularly Heterogeneous Myeloid Leukemias

1159 AZD8931, an Equipotent, Reversible Inhibitor of Signaling by Epidermal Growth Factor Receptor, ERBB2 (HER2), and ERBB3: A Unique Agent for Simultaneous ERBB Receptor Blockade in Cancer

1170 Blockade of the Extracellular Signal-Regulated Kinase Pathway Enhances the Therapeutic Efficacy of Microtubule-Destabilizing Agents in Human Tumor Xenograft Models
Kazushi Watanabe, Susumu Tanimura, Aya Uchiyama, Toshiaki Sakamoto, Takumi Kawabata, Kei-ichi Ozaki, and Michiaki Kohn
Low-Molecular-Weight Cyclin E Can Bypass Letrozole-Induced G1 Arrest in Human Breast Cancer Cells and Tumors
Said Akli, Tuyen Bui, Hannah Wingate, Anna Biernacka, Stacy Moulder, Susan L. Tucker, Kelly K. Hunt, and Khandan Keyomarsi

1191 Anti-Transforming Growth Factor β Receptor II Antibody Has Therapeutic Efficacy against Primary Tumor Growth and Metastasis through Multieffects on Cancer, Stroma, and Immune Cells

CANCER THERAPY: CLINICAL

1256 A Phase I Safety and Pharmacokinetic Study of the Death Receptor 5 Agonistic Antibody PRO95780 in Patients with Advanced Malignancies
D. Ross Camidge, Roy S. Herbst, Michael S. Gordon, S. Gail Eckhardt, Razelle Kurzrock, Blythe Durbin, Josephine Ing, Tanyifor M. Tohnya, Jason Sager, Awi Ashkenazi, Gordon Bray, and David Mendelson

1264 Tipifarnib Plus Tamoxifen in Tamoxifen-Resistant Metastatic Breast Cancer: A Negative Phase II and Screening of Potential Therapeutic Markers by Proteomic Analysis
Florence Dalenc, Sophie F. Doisneau-Sixou, Ben C. Allal, Sabrina Marsili, Valérie Lauwers-Cances, Karima Chaoui, Odile Schiltz, Bernard Monsarrat, Thomas Fillieron, Nicole Renée, Emilie Malissein, Elise Meunier, Gilles Favre, and Henri Roché

1272 The Predictive Value of HLA Class I Tumor Cell Expression and Presence of Intratumoral Tregs for Chemotherapy in Patients with Early Breast Cancer

IMAGING, DIAGNOSIS, PROGNOSIS

1206 MutS Homologue 2 and the Long-term Benefit of Adjuvant Chemotherapy in Lung Cancer

1215 Metastatic Renal Cell Carcinoma Treated with Sunitinib: Early Evaluation of Treatment Response Using Dynamic Contrast-Enhanced Ultrasonography
Nathalie Lassau, Serge Koscielny, Laurence Albiges, Linda Chami, Baya Benatsou, Mohamed Chebil, Alain Roche, and Bernard J. Escudier

1225 Tobacco Use in Human Papillomavirus–Positive Advanced Oropharynx Cancer Patients Related to Increased Risk of Distant Metastases and Tumor Recurrence

A 3’-Untranslated Region Polymorphism in IGF1 Predicts Survival of Non–Small Cell Lung Cancer in a Chinese Population
Mingfeng Zhang, Zhibin Hu, Jinlin Huang, Yongqian Shu, Juncheng Dai, Guangfu Jin, Rong Tang, Jing Dong, Yijiang Chen, Lin Xu, Xifen Huang, and Hongbing Shen

Low Levels of Phosphorylated Epidermal Growth Factor Receptor in Nonmalignant and Malignant Prostate Tissue Predict Favorable Outcome in Prostate Cancer Patients
Peter Hammarsten, Amar Karalija, Andreas Josephsson, Stina Häggström Rudolfsson, Pernilla Wikström, Lars Egevad, Torvald Granfors, Pär Stattin, and Anders Bergh
Leona Downey, Robert B. Livingston, Maria Koehler, Michael Arbushites, Lisa Williams, Angela Santiago, Roberta Guzman, Ivonne Villalobos, Angelo Di Leo, and Michael F. Press

Phase I Oncology Studies: Evidence That in the Era of Targeted Therapies Patients on Lower Doses Do Not Fare Worse
Rajul K. Jain, J. Jack Lee, David Hong, Maurie Markman, Jing Gong, Aung Naing, Jennifer Wheler, and Razelle Kurzrock
See commentary p. 1085

Phase I Trial of Pelvic Radiation, Weekly Cisplatin, and 3-Aminopyridine-2-Carboxaldehyde Thiosemicarbazone (3-AP, NSC #663249) for Locally Advanced Cervical Cancer
Charles A. Kunos, Steven Waggoner, Vivian von Gruenigen, Elisa Eldermire, John Pink, Afshin Dowlati, and Timothy J. Kinsella

Randomized Phase III Trial of Gefitinib versus Docetaxel in Non–Small Cell Lung Cancer Patients Who Have Previously Received Platinum-Based Chemotherapy
Dae Ho Lee, Keunchil Park, Joo Hang Kim, Jong-Seok Lee, Sang Won Shin, Jin-Hyong Kang, Myung-Ju Ahn, Jin Seok Ahn, Cheolwon Suh, and Sang-We Kim

Phase I Clinical and Magnetic Resonance Imaging Study of the Vascular Agent NGR-hTNF in Patients with Advanced Cancers (European Organization for Research and Treatment of Cancer Study 16041)

Potential Clinical Significance of a Plasma-Based KRAS Mutation Analysis in Patients with Advanced Non–Small Cell Lung Cancer
Shuhang Wang, Tongtong An, Jie Wang, Jun Zhao, Zhijie Wang, Minglei Zhuo, Hua Bai, Lu Yang, Yan Zhang, Xin Wang, Jianchun Duan, Yuyan Wang, Qingzhi Guo, and Meina Wu

Removing and Colorectal Cancer in Lynch Syndrome: Results from the Colon Cancer Family Registry and The University of Texas M.D. Anderson Cancer Center
Mala Pande, Patrick M. Lynch, John L. Hopper, Mark A. Jenkins, Steve Gallinger, Robert W. Haile, Loic LeMarchand, Noralane M. Lindor, Peter T. Campbell, Polly A. Newcomb, John D. Potter, John A. Baron, Marsha L. Frazier, and Christopher I. Amos

Studies of TMPRSS2-ERG Gene Fusions in Diagnostic Trans-Rectal Prostate Biopsies
Gerhardt Attard, Johann S. de Bono, Jeremy Clark, and Colin S. Cooper

In Response
Martin G. Sanda

Vascular Endothelial Growth Factor Concentration as a Predictive Marker: Ready for Primetime?
Peter A. Kavasak, Hal Hirti, and Sebastien J. Hotte

In Response
Emer O. Hanrahan, Anderson J. Ryan, and John V. Heymach

Correction: A First-in-Man Phase I and Pharmacokinetic Study on CHR-2797 (Tosedostat), an Inhibitor of M1 Aminopeptidases, in Patients with Advanced Solid Tumors

Correction: The Novel Expanded Porphyrin, Motexafin Gadolinium, Combined with [90Y] Ibritumomab Tiuxetan for Relapsed/Refractory Non-Hodgkin’s Lymphoma: Preclinical Findings and Results of a Phase I Trial
ABOUT THE COVER

Expression of the miR-34 family was found to be frequently reduced in human epithelial ovarian cancer, particularly so in tumors with p53 mutations. The figure shows miR-34a expression (dark blue) in ovarian serous adenocarcinoma as determined by in situ hybridization with locked nucleic acid–modified probes. Immunohistochemistry in serial sections revealed significant inverse correlation between miR-34a and its target MET, an oncogene commonly overexpressed in advanced stages of cancer. For details, see the article by Corney and colleagues on page 1119 of this issue.