Contents

Highlights of This Issue 3089

SPECIAL FEATURES

3091 How to Train Your Biomarker
Douglas Yee
See article p. 3193

3094 Inhibition of the PI3K Pathway:
Hope We Can Believe in?
Michiel S. van der Heijden
and René Bernards

3100 Immunogenic Tumor Cell Death
for Optimal Anticancer Therapy:
The Calreticulin Exposure Pathway
Laurence Zitvogel, Oliver Kepp,
Laura Senovilla, Laurie Menger,
Nathalie Chaput, and Guido Kroemer

3105 Drugs That Target the
Stemness Pathways
Susan E. Bates

3106 Controversies in Cancer Stem
Cells: Targeting Embryonic
Signaling Pathways
Naoko Takebe and S. Percy Ivy

3113 Cancer Stem Cells and Self-renewal
Catherine Adell O’Brien, Antonija Kreso,
and Catriona H.M. Jamieson

3121 The Difficulty of Targeting Cancer
Stem Cell Niches
Mark A. LaBarge

3130 Targeting Hedgehog—a Cancer
Stem Cell Pathway
Akil A. Merchant and William Matsui

3141 Targeting Notch to Target Cancer
Stem Cells
Antonio Pannuti, Kimberly Foreman,
Paola Rizzo, Clodia Osipo, Todd Golde,
Barbara Osborne, and Lucio Miele

CCR Translations

3153 Targeting Wnt Signaling: Can We
Safely Eradicate Cancer Stem Cells?
Fumi Takahashi-Yanaga and Michael Kahn

HUMAN CANCER BIOLOGY

3163 Molecular Diagnosis of Activating
EGFR Mutations in Non–Small
Cell Lung Cancer Using
Mutation-Specific Antibodies for
Immunohistochemical Analysis
Akihiko Kawahara, Chizuko Yamamoto,
Kazutaka Nakashima, Koichi Azuma,
Satoshi Hattori, Masaki Kashihiara,
Hisamichi Aizawa, Yuji Basaki,
Michihiko Kurosawa, Masayoshi Kage,
Tetsuya Mitsudomi, and Mayumi Ono

3171 Aurora Kinase A Promotes Ovarian
Tumorigenesis through
Dysregulation of the Cell Cycle and
Suppression of BRCA2
Gong Yang, Bin Chang, Fan Yang,
Xiaoqing Guo, Kathy Qi Cai,
Xue (Sherry) Xiao, Huamin Wang,
Subrata Sen, Mien-Chie Hung,
Gordon B. Mills, Sandy Chang,
Ash A. Multani, Imelda Mercado-Uribe,
and Jinsong Liu

CANCER THERAPY: PRECLINICAL

3182 FYT720 Shows Promising In vitro
and In vivo Preclinical Activity by
Downmodulating Cyclin D1
and Phospho-Akt in Mantle
Cell Lymphoma
Qing Liu, Lapo Alinari, Ching-Shih Chen,
Fengting Yan, James T. Dalton,
Rosa Lapalombella, Xiaoli Zhang,
Rajeswaran Mani, Teresa Lin, John C. Byrd,
Robert A. Baiocchhi, and Natarajan Muthusamy

3193 Development of an Integrated
Genomic Classifier for a Novel
Agent in Colorectal Cancer:
Approach to Individualized Therapy
in Early Development
Todd M. Pitts, Aik Choon Tan,
Gillian N. Kulikowski, John J. Tentler,
Amy M. Brown, Sara A. Flanigan,
Stephen Leong, Christopher D. Coldren,
Fred R. Hirsch, Marilella Varella-Garcia,
Christopher Korch, and S. Gail Eckhardt
See commentary p. 3091
CANCER THERAPY: CLINICAL

Phase II Clinical and Pharmacokinetic Study of Plitidepsin 3-Hour Infusion Every Two Weeks Alone or with Dexamethasone in Relapsed and Refractory Multiple Myeloma
Maria Victoria Mateos, Maria Teresa Cibeira, Paul G. Richardson, Felipe Prosper, Albert Oriol, Javier de la Rubia, Juan José Lahuerta, Ramón García-Sanz, Sonia Extremera, Sergio Szylderegemajn, Claudia Corrado, Harald Singer, Constantine S. Mitsiades, Kenneth C. Anderson, Joan Bladé, and Jesús San Miguel

IMAGING, DIAGNOSIS, PROGNOSIS

Drug-Induced Vessel Remodeling in Bone Metastases as Assessed by Dynamic Contrast Enhanced Magnetic Resonance Imaging and Vessel Size Imaging: A Longitudinal In vivo Study
Tobias Bäuerle, Maximilian Merz, Dorde Komljenovic, Stefan Zwick, and Wolfhard Semmler

Complement Factor H Autoantibodies Are Associated with Early Stage NSCLC
Nita Amornsiripanitch, Shaolin Hong, Michael J. Campa, Michael M. Frank, Elizabeth R. Gottlin, and Edward F. Patz, Jr.

A Four-Kallikrein Panel Predicts Prostate Cancer in Men with Recent Screening: Data from the European Randomized Study of Screening for Prostate Cancer, Rotterdam

HDAC5 and HDAC9 in Medulloblastoma: Novel Markers for Risk Stratification and Role in Tumor Cell Growth
Till Milde, Ina Oehme, Andrey Korshunov, Annette Kopp-Schneider, Marc Remke, Paul Northcott, Hedwig E. Deubzer, Marco Lodrini, Michael D. Taylor, Andreas von Deimling, Stefan Pfister, and Olaf Witt

Overexpression of p73 as a Tissue Marker for High-Risk Gastritis
Gonzalo Carrasco, Jose Diaz, Jose R. Valbuena, Paulina Ibanez, Paz Rodriguez, Gabriela Araya, Carolina Rodriguez, Javiera Torres, Ignacio Duarte, Edmundo Aravena, Fernando Mena, Carlos Barrientos, and Alejandro H. Corvalan
ABOUT THE COVER

Early detection of gastric cancer requires risk assessment of premalignant conditions. The cover image shows a positive and negative representative immunostain of eight tissue markers (BRCA1, HSP90, EGFR, p73, STAT1, FHIT, p16INK4a and p53) and EBER-1 expression in tissue microarrays of early gastric cancer, nontumor adjacent mucosa, and chronic gastritis control cases, where p73 emerges and may have a potential role in the assessment of high-risk gastritis. Moreover, integration of these findings with histological features shows that overexpression of p73 is the most relevant finding. For further details, please see the article by Carrasco and colleagues on page 3253 of this issue.