Highlights of This Issue 3999

SPECIAL FEATURES

CCR Translations

4001 How to Develop Treatments for Biologically Heterogeneous "Diseases"
Richard M. Simon
See article p. 4004

Statistics in Clinical Cancer Research

4004 Design of a Phase III Clinical Trial with Prospective Biomarker Validation: SWOG S0819
Mary W. Redman, John J. Crowley, Roy S. Herbst, Fred R. Hirsch, and David R. Gandara
See commentary p. 4001

Molecular Pathways

4013 Molecular Pathways: Targeting Phosphoinositide 3-Kinase p110-Delta in Chronic Lymphocytic Leukemia
Sarah E.M. Herman and Amy J. Johnson

4019 Molecular Pathways: Involving Microenvironment Damage Responses in Cancer Therapy Resistance
Yu Sun and Peter S. Nelson

HUMAN CANCER BIOLOGY

4026 Molecular Profiling Reveals Low- and High-Grade Forms of Primary Melanoma

CANCER THERAPY: PRECLINICAL

4070 Inhibition of Histone Deacetylation Potentiates the Evolution of Acquired Temozolomide Resistance Linked to MGMT Upregulation in Glioblastoma Xenografts

4080 IGKV3 Proteins as Candidate "Off-the-Shelf" Vaccines for Kappa-Light Chain–Restricted B-Cell Non-Hodgkin Lymphomas
Debora Martorelli, Massimo Guidoboni, Valli De Re, Elena Muraro, Riccardo Turrini, Anna Merlo, Elisa Pasini, Laura Caggiari, Luca Romagnoli, Michele Spina, Roberta Mortarini, Daniela Gasparotto, Mario Mazzucato, Antonino Carbone, Antonio Rosato, Andrea Anichini, and Riccardo Dolcetti
The Antibody-Based Delivery of Interleukin-12 to the Tumor Neovasculature Eradicates Murine Models of Cancer in Combination with Paclitaxel

Nadine Pasche, Sarah Wulhfard, Francesca Pretto, Elisa Carugati, and Dario Neri

Cancer Network Disruption by a Single Molecule Inhibitor Targeting Both Histone Deacetylase Activity and Phosphatidylinositol 3-Kinase Signaling

Changgeng Qian, Cheng-Jung Lai, Rudi Bao, Da-Gong Wang, Jing Wang, Guang-Xin Xu, Ruzanna Atoyun, Hui Qu, Ling Yin, Maria Samsson, Brian Zilfack, Anna Wai See Ma, Steven DellaRocca, Mylissa Borek, Hai-Xiao Zhai, Xiong Cai, and Maurizio Voi

Metronomic Activity of CD44-Targeted Hyaluronic Acid-Paclitaxel in Ovarian Carcinoma

Sun Joo Lee, Sukhen C. Ghosh, Hee Dong Han, Rebecca L. Stone, Justin Bottsford-Miller, De Yue Shen, Edmond J. Auzenne, Alejandro Lopez-Araujo, Chunhua Lu, Masato Nishimura, Chad V. Pecot, Behrouz Zand, Duangmani Thanapparapas, Nicholas B Jennings, Yu Kang, Jie Huang, Wei Hu, Jim Klostergaard, and Anil K. Sood

Progenitor-like Traits Contribute to Patient Survival and Prognosis in Oligodendrogial Tumors

Felicia Soo-Lee Ng, Tan Boon Toh, Esther Hui-Ling Ting, Geraldene Rong-Hui Koh, Edwin Sandanaraj, Mark Phong, Swee Seong Wong, Siew Hong Leong, Oi Lian Kon, Greg Tucker-Kellogg, Wai Hoe Ng, Ivan Ng, Carol Tang, and Beng Ti Ang

Breast Cancer Cell Targeting by Prenylation Inhibitors Elucidated in Living Animals with a Bioluminescence Reporter

Sharon L. Chinault, Julie L. Prior, Kevin M. Kaltenbronn, Anya Penly, Katherine N. Weilbaecher, David Piwnica-Worms, and Kendall J. Blumer

The Prognostic Significance of Vasohibin-1 Expression in Patients with Upper Urinary Tract Urothelial Carcinoma

Yasumasa Miyazaki, Takeo Kosaka, Shuji Mikami, Eiji Kikuchi, Nobuyuki Tanaka, Takahiro Maeda, Masaru Ishida, Akira Miyajima, Ken Nakagawa, Yasunori Okada, Yasufumi Sato, and Mototsugu Oya

Performance of p16/Ki-67 Immunostaining to Detect Cervical Cancer Precursors in a Colposcopy Referral Population

Nicolas Wentzensen, Lauren Schwartz, Rosemary E. Zuna, Katie Smith, Cara Mathews, Michael A. Gold, R. Andy Allen, Roy Zhang, S. Terence Dunn, Joan L. Walker, and Mark Schiffman

ERG Rearrangement for Predicting Subsequent Cancer Diagnosis in High-Grade Prostatic Intraepithelial Neoplasia and Lymph Node Metastasis

Xin Gao, Liao-Yuan Li, Fang-Jian Zhou, Ke-Ji Xie, Chun-Kui Shao, Zu-Lan Su, Qi-Peng Sun, Ming-Xun Chen, Jun Pang, Xiang-Yu Zhou, Jian-Guang Qiu, Xing-Qiao Wen, Ming Yang, Xian-Zhong Bai, Hao Zhang, Li Ling, and Zhong Chen

Pretreatment EBV-DNA Copy Number Is Predictive of Response and Toxicities to SMILE Chemotherapy for Extranodal NK/T-cell Lymphoma, Nasal Type

Functional Analysis of the ATM-p53-p21 Pathway in the LRF CLL4 Trial: Blockade at the Level of p21 Is Associated with Short Response Duration

Ke Lin, Janet Adamson, Gillian G. Johnson, Anthony Carter, Melanie Oates, Rachel Wade, Sue Richards, David Gonzalez, Estella Matutes, Claire Dearden, David G. Oscier, Daniel Catovsky, and Andrew R. Pettitt

TP53 Genomic Status Regulates Sensitivity of Gastric Cancer Cells to the Histone Methylation Inhibitor 3-Deazaneplanocin A (DZNep)

Lai Ling Cheng, Yoko Itahana, Zheng Deng Lei, Na-Yu Chia, Yonghui Wu, Yingnan Yu, Shen Li Zhang, Aye Aye Thike, Anuradha Pandey, Steve Rozen, Pieter Mathijs Voorhoeve, Qiang Yu, Puay Hoon Tan, Boom Huat Bay, Koji Itahana, and Patrick Tan

LETTERS TO THE EDITOR

Lifetime Cancer Risks of PTEN Mutation Carriers—Letter

Molly S. Daniels, Thereasa Rich, Scott Weissman, and Robert Pilarski

Lifetime Cancer Risks of PTEN Mutation Carriers—Response

Min-Han Tan, Jessica Mester, and Charis Eng

CORRECTIONS

Correction: New Strategies in Squamous Cell Carcinoma of the Lung: Identification of Tumor Drivers to Personalize Therapy

Correction: MicroRNA-148a Suppresses Tumor Cell Invasion and Metastasis by Downregulating ROCK1 in Gastric Cancer

ABOUT THE COVER

The recently discovered recurrent ERG rearrangement is highly specific for prostate cancer. There are significant associations of ERG rearrangement in preoperative biopsies with pelvic lymph node metastasis for patients with prostate cancer. The fluorescence in situ hybridization image shows representative nuclei of a prostate cancer gland. One yellow/one green/one red in a nucleus represents abnormal signal patterns indicative of an ERG rearrangement. For details, please see the article by Gao and colleagues on page 4163 of this issue.