## Highlights of This Issue

### CCR Translations

5215

**Overcoming Antiangiogenic Resistance**

James C. Yao and Alexandria Phan

See article p. 5299

### CCR Perspectives in Drug Approval

5220

**The European Medicines Agency: An Overview of Its Mission, Responsibilities, and Recent Initiatives in Cancer Drug Regulation**

Francesco Pignatti, Iordanis Gravanis, Ralf Herold, Spiros Vamvakas, Bertil Jonsson, and Michel Marty

### Molecular Pathways

5226

**Angiopoietin-2 TIEs Up Macrophages in Tumor Angiogenesis**

Michele De Palma and Luigi Naldini

5233

**Prostate Cancer Immunotherapy**

Kenneth F. May, Jr., James L. Gulley, Charles G. Drake, Glenn Dranoff, and Philip W. Kantoff

### Special Report

5239

**SWOG Cooperative Group Biorepository Resource: Access for Scientific Research Studies**

Carolyn J. Hoban, Wilbur A. Franklin, Kenneth J. Kopecky, and Laurence H. Baker

### HUMAN CANCER BIOLOGY

5257

**Novel Functional Germline Variants in the VEGF Receptor 2 Gene and Their Effect on Gene Expression and Microvessel Density in Lung Cancer**


5268

**Clonal Relationship of Classical Hodgkin Lymphoma and its Recurrences**

Ellen C. Obermann, Nadine Mueller, Alexander Ruffle, Thomas Menter, Esther Mueller-Garamvoeligyi, Gieri Cathomas, Stephan Dirnhofer, and Alexandar Tzankov

5275

**FGFR Signaling Promotes the Growth of Triple-Negative and Basal-Like Breast Cancer Cell Lines Both In Vitro and In Vivo**

Rachel Sharpe, Alex Pearson, Maria T. Herrera-Abreu, Damian Johnson, Alan Mackay, Jonathan C. Welti, Rachael Natrajan, Andrew R. Reynolds, Jorge S. Reis-Filho, Alan Ashworth, and Nicholas C. Turner

5287

**Regulatory Role of mir-203 in Prostate Cancer Progression and Metastasis**

Sharanjot Saini, Shalana Majid, Soichiro Yamamura, Laura Tabatabai, Seong O. Suh, Varahram Shahrery, Yi Chen, Guoren Deng, Yuichiro Tanaka, and Rajvir Dahiya

### CANCER THERAPY: PRECLINICAL

5299

**Brivanib, a Dual FGF/VEGF Inhibitor, Is Active Both First and Second Line against Mouse Pancreatic Neuroendocrine Tumors Developing Adaptive/Evasive Resistance to VEGF Inhibition**

Elizabeth Allen, Ian B. Walters, and Douglas Hanahan

See commentary p. 5217
In Vitro and In Vivo Selective Antitumor Activity of a Novel Orally Bioavailable Proteasome Inhibitor MLN9708 against Multiple Myeloma Cells
Dharminder Chauhan, Ze Tian, Bin Zhou, Deborah Kuhn, Robert Orlowski, Noopur Raje, Paul Richardson, and Kenneth C. Anderson

Gastric Cancer Growth Control by BEZ235 In Vivo Does Not Correlate with PI3K/mTOR Target Inhibition but with [18F]FLT Uptake
Thorsten Fuereder, Thomas Wanek, Pamina Pflegerl, Agnes Jaeger-Lansky, Doris Hoellmayer, Sabine Strommer, Claudia Kuntner, Friedrich Wrb, Johannes Werzowa, Michael Hejna, Markus Müller, Oliver Langer, and Volker Wacheck

Regression of Glioma in Rat Models by Intranasal Application of Parvovirus H-1
Irina Kiprianova, Nadja Thomas, Ali Ayache, Manuel Fischer, Barbara Leuchs, Michèle Klein, Jean Rommelære, and Jörg R. Schlehofer

Determinants of Successful CD8+ T-Cell Adoptive Immunotherapy for Large Established Tumors in Mice
Christopher A. Klebanoff, Luca Gattinoni, Douglas C. Palmer, Pawel Muranski, Yun Ji, Christian S. Hinrichs, Zachary A. Borman, Sid P. Kerkar, Christopher D. Scott, Steven E. Finkelson, Steven A. Rosenberg, and Nicholas P. Restifo

PM02734 (Elisidepsin) Induces Caspase-Independent Cell Death Associated with Features of Autophagy, Inhibition of the Akt/mTOR Signaling Pathway, and Activation of Death-Associated Protein Kinase
Yi-He Ling, Miguel Aracil, Yiyu Zou, Ziqiang Yuan, Bo Lu, José Jimeno, Ana Maria Cuervo, and Roman Perez-Soler

Targeting Src in Mucinous Ovarian Carcinoma
Koji Matsuo, Masato Nishimura, Justin N. Botsford-Miller, Jie Huang, Kakajan Komurov, Guillermo N. Armaiz-Pena, Mian M. K. Shahzad, Rebecca L. Stone, Ju Won Roh, Angela M. Sanguino, Chunhua Lu, Dwight D. Im, Neil B. Rosenshien, Atsuko Sakakibara, Tadayoshi Nagano, Masato Yamasaki, Takayuki Enomoto, Tadashi Kimura, Prabhat T. Ram, Kathleen M. Schmeler, Gary E. Gallick, Kwong K. Wong, Michael Frumovitz, and Anil K. Sood

Lupeol, a Novel Androgen Receptor Inhibitor: Implications in Prostate Cancer Therapy
Hifzur Rahman Siddique, Shrawan Kumar Mishra, R. Jeffery Karnes, and Mohammad Saleem

Induction of HLA-DP4–Restricted Anti-Survivin Th1 and Th2 Responses Using an Artificial Antigen-Presenting Cell
Makito Tanaka, Marcus O. Butler, Sascha Ansén, Osamu Imataki, Alla Berezovskaya, Lee M. Nadler, and Naoto Hirano

Resveratrol Selectively Induces DNA Damage, Independent of Smad4 Expression, in Its Efficacy against Human Head and Neck Squamous Cell Carcinoma
Alpna Tyagi, Mallikarjunu Ga, Takenori Takahata, Barbara Frederic, Chapla Agarwal, Sunita Siritwardana, Rajesh Agarwal, and Robert A. Scalfani

Role of Smac in Determining the Chemotherapeutic Response of Esophageal Squamous Cell Carcinoma
Yang Xu, Lanping Zhou, Jing Huang, Fang Liu, Jian Yu, Qimin Zhan, Lin Zhang, and Xiaohang Zhao

Antitumor Activity of YM155, a Selective Small-Molecule Survivin Suppressant, Alone and in Combination with Docetaxel in Human Malignant Melanoma Models
Kentaro Yamanaka, Takahito Nakahara, Tomohiro Yamauchi, Aya Kita, Masahiro Takeuchi, Fumiko Kiyonaga, Naoki Kaneko, and Masao Sasamata

Effective Targeting of Triple-Negative Breast Cancer Cells by PF-4942847, a Novel Oral Inhibitor of Hsp 90
Pramod P. Mehta, Pamela Whalen, Sangita M. Baxi, Pei-Pei Kung, Shinihi Yamazaki, and Min-Jean Yin

Prognostic Model for Survival in Patients with Metastatic Renal Cell Carcinoma: Results from the International Kidney Cancer Working Group

IMAGING, DIAGNOSIS, PROGNOSIS
BARD1 Expression Predicts Outcome in Colon Cancer
Judith C. Sporn, Torsten Hothorn, and Barbara Jung

Gene Expression Profiling of Fixed Tissues Identified Hypoxia-Inducible Factor-1α, VEGF, and Matrix Metalloproteinase-2 as Biomarkers of Lymph Node Metastasis in Hepatocellular Carcinoma
Zuo-Lin Xiang, Zhao-Chong Zeng, Jia Fan, Zhao-You Tang, Hai-Ying Zeng, and Dong-Mei Gao

Immunosuppression in Patients with High-Grade Gliomas Treated with Radiation and Temozolomide
Stuart A. Grossman, Xiaobu Ye, Glenn Lesser, Andrew Sloan, Hetty Carraway, Serena Desideri, and Steven Plantadosi for the NABTT CNS Consortium

A Phase II Study of Pazopanib in Asian Patients with Recurrent/Metastatic Nasopharyngeal Carcinoma
Wan-Teck Lim, Quan-Sing Ng, Percy Ivy, Swan-Swan Leong, Onkar Singh, Balram Chowbay, Fei Gao, Choon Huai Thng, Boon-Cher Goh, Daniel Shao-Weng Tan, Tong San Koh, Chee-Keong Toh, and Eng-Huat Tan

Platinum Sensitivity–Related Germline Polymorphism Discovered via a Cell-Based Approach and Analysis of Its Association with Outcome in Ovarian Cancer Patients

Membranous Expression of Ectodomain Isoforms of the Epidermal Growth Factor Receptor Predicts Outcome after Chemoradiotherapy of Lymph Node–Negative Cervical Cancer
Cathinka Halle, Malin Lando, Debbie Hege Svendsrud, Trevor Clancy, Marit Holden, Kolbein Sundlor, Gunnar B. Kristensen, Ruth Holm, and Heidi Lyng

XPF Expression Correlates with Clinical Outcome in Squamous Cell Carcinoma of the Head and Neck

Correction: Regulation of HMGA1 Expression by MicroRNA-296 Affects Prostate Cancer Growth and Invasion

Correction: Intracellular Activation of SGN-35, a Potent Anti-CD30 Antibody-Drug Conjugate
ABOUT THE COVER

Immunohistochemical analysis confirmed that YM155 reduced survivin protein levels, whereas docetaxel treatment increased p34 Thr-survivin protein at G2/M mitotic arrest. Furthermore, the concomitant treatment YM155 apparently decreased the docetaxel-induced survivin upregulation below the basal level in SK-MEL-5 human malignant melanoma cell. For further details, please see Yamanaka and colleagues on page 5423 in this issue.