### Highlights of This Issue

#### SPECIAL FEATURES

**CCR Translations**

- **595**
  - New Treatments for Rhabdomyosarcoma: The Importance of Target Practice
  - Frederic G. Barr
  - *See article p. 796*

**Molecular Pathways**

- **598**
  - Molecular Pathways: Targeting Mechanisms of Asbestos and Erionite Carcinogenesis in Mesothelioma
  - Michele Carbone and Haining Yang

**CCR Focus**

- **606**
  - A Millennium Goal for Cancer
  - Susan E. Bates

- **607**
  - Overview of the AACR Clinical and Translational Cancer Research Think Tank Meeting
  - Kenneth C. Anderson and Raymond N. DuBois

- **612**
  - Impact of Genomics on Personalized Cancer Medicine
  - Carlos L. Arteaga and José Baselga

- **619**
  - Making Personalized Cancer Medicine a Reality: Challenges and Opportunities in the Development of Biomarkers and Companion Diagnostics
  - David R. Parkinson, Bruce E. Johnson, and George W. Sledge

- **625**
  - Genetically Modified Mouse Models for Biomarker Discovery and Preclinical Drug Testing
  - Raju Kucherlapati

- **631**
  - Imaging: Strategies, Controversies, and Opportunities
  - Ronald Blasberg and David Piwnica-Worms

- **638**
  - Reports from the 2010 Clinical and Translational Cancer Research Think Tank Meeting: Design Strategies for Personalized Therapy Trials
  - Donald A. Berry, Roy S. Herbst, and Eric H. Rubin

**Review**

- **645**
  - Cancer Dormancy: A Model of Early Dissemination and Late Cancer Recurrence
  - David Páez, Melissa J. Labonte, Pierre Bohanes, Wu Zhang, Leonor Benhaim, Yan Ning, Takeru Wakatsuki, Fotios Loupakis, and Heinz-Josef Lenz

**HUMAN CANCER BIOLOGY**

- **654**
  - Notch Signaling Promotes Growth and Invasion in Uveal Melanoma

- **666**
  - Modeling a Lethal Prostate Cancer Variant with Small-Cell Carcinoma Features
  - Vassiliki Tzelepi, Jie Xin Zhang, Jing-Fang Lu, Brittany Kleb, Guanglin Wu, Xinhai Wan, Anh Hoang, Eleni Efstatiaiou, Kanishka Sircar, Nora M. Navone, Patricia Troncoso, Shoudan Liang, Christopher J. Logothetis, Sankar N. Maity, and Ana M. Aparicio

- **678**
  - Expansion of a CD8+ PD-L1+ Replicative Senescence Phenotype in Early Stage CLL Patients Is Associated with Inverted CD4:CD8 Ratios and Disease Progression
  - Claudia Nunes, Ryan Wong, Malcolm Mason, Chris Fegan, Stephen Man, and Chris Pepper

- **688**
  - Primary Colorectal Cancers and Their Subsequent Hepatic Metastases Are Genetically Different: Implications for Selection of Patients for Targeted Treatment

- **700**
  - Genome-Wide CpG Island Profiling of Intraductal Papillary Mucinous Neoplasms of the Pancreas
  - Seung-Mo Hong, Noriyuki Omura, Audrey Vincent, Ang Li, Spencer Knight, Jun Yu, Ralph H. Hruban, and Michael Goggins
Upregulated IL-19 in Breast Cancer Promotes Tumor Progression and Affects Clinical Outcome  
Chung-Hsi Hsing, Hung-Chi Cheng, Yu-Hsiang Hsu, Chien-Hui Chan, Ching-Hua Yeh, Chien-Feng Li, and Ming-Shi Chang

Activation of β-Catenin Signaling in Androgen Receptor–Negative Prostate Cancer Cells  
Xinhai Wan, Jie Liu, Jing-Fang Lu, Michael W. Starbuck, Lixia Diao, Jing Wang, Eleni Efthathiou, Elba S. Vazquez, Patricia Troncoso, Sankar N. Maity, and Nora M. Navone

MiR-1 Downregulation Cooperates with MACC1 in Promoting MET Overexpression in Human Colon Cancer  
Cristina Migliore, Valentina Martin, Vera P. Leoni, Angelo Restivo, Luigi Atzori, Annalisa Petrelli, Claudio Isella, Luigi Zorcolo, Ivana Sarotto, Giuseppe Casula, Paolo M. Cosmoglio, Amedeo Columbano, and Silvia Giordano

Oncogene Mutation Profiling of Pediatric Solid Tumors Reveals Significant Subsets of Embryonal Rhabdomyosarcoma and Neuroblastoma with Mutated Genes in Growth Signaling Pathways  
Cristina Migliore, Valentina Martin, Vera P. Leoni, Angelo Restivo, Luigi Atzori, Annalisa Petrelli, Claudio Isella, Luigi Zorcolo, Ivana Sarotto, Giuseppe Casula, Paolo M. Cosmoglio, Amedeo Columbano, and Silvia Giordano

Selective Tumor Hypoxia Targeting by Hypoxia-Activated Prodrug TH-302 Inhibits Tumor Growth in Preclinical Models of Cancer  
Jessica D. Sun, Qian Liu, Jingli Wang, Dharmendra Ahuwalia, Damien Ferraro, Yan Wang, Jian-Xin Duan, W. Steve Ammons, John G. Barr, and Marc Ladanyi

Omental Adipose Tissue–Derived Stromal Cells Promote Vascularization and Growth of Endometrial Tumors  

Modulation of NOXA and MCL-1 as a Strategy for Sensitizing Melanoma Cells to the BH3-Mimetic ABT-737  
Keryn M. Lucas, Nethia Mohana-Kumaran, Diana Lau, Xu Dong Zhang, Peter Hersey, David C. Huang, Wolfgang Weninger, Nikolaus K. Haass, and John D. Allen

Antitumor Activity of Sustained N-Myc Reduction in Rhabdomyosarcomas and Transcriptional Block by Antigene Therapy  
Roberto Tonelli, Alan McIntyre, Consuelo Camerin, Zoe S. Walters, Korinna Di Leo, Joanna Selfe, Stefania Purgato, Edoardo Missaglia, Andrea Tortori, Jane Renshaw, Annalisa Astolfi, Kathryn R. Taylor, Salvatore Serravalle, Ryan Bishop, Cristina Nanni, Linda J. Valentijn, Andrea Faccini, Ivo Leuschner, Serena Formica, Jorge S. Reis-Filho, Valentina Ambrosini, Khin Thway, Monica Franzoni, Brenda Summersgill, Rosangela Marchelli, Patrizia Hrelia, Giorgio Cantelli-Forti, Stefano Fantl, Roberto Corradini, Andrea Pession, and Janet Shipley

See commentary p. 595

Methylated RASSF1a Is the First Specific DNA Marker for Minimal Residual Disease Testing in Neuroblastoma  
Janine Stutterheim, Fatima Ait Ichou, Emmy den Ouden, Rogier Versteeg, Huib N. Caron, Godelieve A.M. Tytgat, and C. Ellen van der Schoot

External Validation of Diagnostic Models to Estimate the Risk of Malignancy in Adnexal Masses  
Caroline Van Holsbeke, Ben Van Calster, Tom Bourne, Silvia Ajossa, Antonia C. Testa, Stefano Guerriero, Robert Fruscio, Andrea Alberto Lissoni, Artur Czekierdowski, Luca Savelli, Sabine Van Huffel, Lil Valentin, and Dirk Timmerman

Mitotic Checkpoints and Chromosome Instability Are Strong Predictors of Clinical Outcome in Gastrointestinal Stromal Tumors  
Pauline Lagarde, Gaëlle Pérotil, Audrey Kaufmann, Céline Bruard, Valérie Dapremont, Isabelle Hostein, Agnès Neuville, Agnieszka Wozniak, Raf Sciot, Patrick Schoffski, Alain Aurias, Jean-Michel Coindre, Maria Debiec-Rychter, and Frédéric Chibon
Pharmacokinetically Stabilized Cystine Knot Peptides That Bind Alpha-\(\nu\)-Beta-6 Integrin with Single-Digit Nanomolar Affinities for Detection of Pancreatic Cancer

Tumor Infiltration by T Lymphocytes Expressing Chemokine Receptor 7 (CCR7) Is Predictive of Favorable Outcome in Patients with Advanced Colorectal Carcinoma
Pierpaolo Correale, Maria Saveria Rotundo, Cirino Botta, Maria Teresa Del Vecchio, Chiara Ginanneschi, Antonella Licitetta, Raffaele Conca, Serena Apollinari, Fabio De Luca, Pierfrancesco Tassone, and Pierosandro Tagliaferri

CANCER THERAPY: CLINICAL

A Live-Attenuated Listeria Vaccine (ANZ-100) and a Live-Attenuated Listeria Vaccine Expressing Mesothelin (CRS-207) for Advanced Cancers: Phase I Studies of Safety and Immune Induction
Dung T. Le, Dirk G. Brockstedt, Ran Nir-Paz, Johannes Hampf, Shruti Mathur, John Nemunaitis, Daniel H. Sternman, Rafifi Hassan, Eric Lutz, Bentley Moyer, Martin Giedlin, Jana-Lynn Louis, Elizabeth A. Sugar, Alice Pons, Andrea L. Cox, Jordana Levine, Aimee Luck Murphy, Peter Blei, Thomas W. Dubensky Jr, Joseph E. Eiden, Elizabeth M. Jaffee, and Daniel A. Laperu

Stem Cell Pathways Contribute to Clinical Chemoresistance in Ovarian Cancer
Adam D. Steg, Kerri S. Bevis, Ashwini A. Katre, Angela Ziebarth, Zachary C. Dobbins, Ronald D. Alvarez, Kui Zhang, Michael Conner, and Charles N. Landen

PREDICTIVE BIOMARKERS AND PERSONALIZED MEDICINE

Clinical Effects of Adjuvant Active Specific Immunotherapy Differ between Patients with Microsatellite-Stable and Microsatellite-Instable Colon Cancer
Vincent A. de Weger, Annelies W. Turkasma, Quirinus J.M. Voorham, Zelda Euler, Herman Beil, Alons J. van den Eertwegh, Elisabeth Bloemena, Herbert M. Pinedo, Jan B. Vermeerken, Harm van Tinteren, Gerrit A. Meijer, and Erik Hooijberg

Predictive and Prognostic Roles of BRAF Mutation in Stage III Colon Cancer: Results from Intergroup Trial CALGB 89803
Shuji Ogino, Kaori Shima, Jeffrey A. Meyerhardt, Nadine J. McCreary, Kimmie Ng, Donna Hollis, Leonard B. Saltz, Robert J. Mayer, Paul Schaefer, Renaud Whittom, Alexander Hantel, Al B. Benson III, Donna Speigelman, Richard M. Goldberg, Monica M. Bertagolli, and Charles S. Fuchs

Opposing Effects of Runx2 and Estradiol on Breast Cancer Cell Proliferation: In Vitro Identification of Reciprocally Regulated Gene Signature Related to Clinical Letrozole Responsiveness
Nyam-Osor Chimge, Sanjeev K. Baniwal, Jingqin Luo, Simon Coetzee, Omar Khalid, Benjamin P. Berman, Debti Tripathy, Matthew J. Ellis, and Baruch Frenkel

LETTER TO THE EDITOR

Targeting Proteasomal Protein Degradation in Cancer—Letter
William K.K. Wu

CORRECTION

Correction: Improving T-cell Therapy for Relapsed EBV-Negative Hodgkin Lymphoma by Targeting Upregulated MAGE-A4
ABOUT THE COVER

A section of endometrial tumor xenografted in a mouse injected with Wi38 fibroblasts that fail to support tumor vascularization. Immunofluorescence analysis with antibodies against CD31 (green) and Ki67 (red) shows lack of CD31-positive vasculature and Ki67-positive proliferating cells exclusively in the peripheral tumor layer (bottom), whereas injection of omental adipose stromal cells increases tumor proliferation and vascularization. For details, see the article by Klopp and colleagues on page 771 of this issue.