**Highlights of This Issue**

**SPECIAL FEATURES**

**CCR Translations**

1309  
Next-Generation Medicine: Combining BCR-ABL and Hedgehog-Targeted Therapies  
Kim-Hien T. Dao and Jeffrey W. Tyner  
See article, p. 1422

1312  
New Data Supporting Modified RECIST (mRECIST) for Hepatocellular Carcinoma  
Riccardo Lencioni  
See article, p. 1503

**CCR Perspectives in Drug Approval**

1315  
Is the European Pediatric Medicine Regulation Working for Children and Adolescents with Cancer?  
Gilles Vassal, Birgit Geoerger, and Bruce Morland

**Statistics in CCR**

1326  
Borrowing Information across Subgroups in Phase II Trials: Is It Useful?  
Boris Freidlin and Edward L. Korn

**CCR Drug Updates**

1335  
Enzalutamide: A Novel Antiandrogen for Patients with Castrate-Resistant Prostate Cancer  
Jean Hoffman-Censits and Wm. Kevin Kelly

**Molecular Pathways**

1340  
Molecular Pathways: Toll-like Receptors in the Tumor Microenvironment—Poor Prognosis or New Therapeutic Opportunity  
Lisa A. Ridnour, Robert Y.S. Cheng, Christopher H. Switzer, Julie L. Heinecke, Stefan Ambs, Sharon Glynn, Howard A. Young, Giorgio Trinchieri, and David A. Wink

1347  
Molecular Pathways: Hepatitis C Virus, CXCL10, and the Inflammatory Road to Liver Cancer  
Jessica Brownell and Stephen J. Polyak

---

**HUMAN CANCER BIOLOGY**

1353  
Murine Microenvironment Metaprotiles Associate with Human Cancer Etiology and Intrinsic Subtypes  
David H. Nguyen, Erik Fredlund, Wei Zhao, Charles M. Perou, Allan Balmain, Jian-Hua Mao, and Mary Helen Barcellos-Hoff

1363  
PD-L1 on Tumor Cells Is Induced in Ascites and Promotes Peritoneal Dissemination of Ovarian Cancer through CTL Dysfunction  
Kaoru Abiko, Masaki Mandai, Junzo Hamanishi, Yumiko Yoshioka, Noriomi Matsumura, Tsukasa Baba, Ken Yamaguchi, Ryusuke Murakami, Ayaka Yamamoto, Budiman Kharma, Kenzo Kosaka, and Ikao Konishi

1375  
Rab25 Regulates Invasion and Metastasis in Head and Neck Cancer  
Panomwat Amornphimoltham, Kamil Rechache, Jamie Thompson, Andrius Masedunskas, Kantima Leelahavanichkul, Vyomesh Patel, Alfredo Molinolo, J. Silvio Gutkind, and Roberto Weigert

1389  
MicroRNA-200a Promotes Anoikis Resistance and Metastasis by Targeting YAP1 in Human Breast Cancer  
San-Jian Yu, Jing-Ying Hu, Xiu-Ying Kuang, Jian-Min Luo, Yi-Feng Hou, Gen-Hong Di, Jiong Wu, Zhen-Zhou Shen, Hou-Yan Song, and Zhi-Ming Shao

1400  
HIC1 Modulates Prostate Cancer Progression by Epigenetic Modification  
Jianghua Zheng, Jinglong Wang, Xueqing Sun, Mingang Hao, Tao Ding, Dan Xiong, Xiumin Wang, Yu Zhu, Gang Xiao, Guangsun Cheng, Meizhong Zhao, Jian Zhang, and Jianhua Wang

1411  
Functional Analysis of Genes in Regions Commonly Amplified in High-Grade Serous and Endometrioid Ovarian Cancer  
Combination of Ponatinib with Hedgehog Antagonist Vismodegib for Therapy-Resistant BCR-ABL1-Positive Leukemia
Seiichiro Katagiri, Tetsuzo Tauchi, Seiichi Okabe, Yosuke Minami, Shinya Kimura, Taira Maekawa, Tomoki Naoe, and Kazuma Ohyashiki
See commentary, p. 1309

Hepatocyte Growth Factor Sensitizes Brain Tumors to c-MET Kinase Inhibition
Ying Zhang, Kaitlyn E. Farenholtz, Yanzhi Yang, Fadila Guessous, Charles G. diPierro, Valerie S. Calvert, Jianghong Deng, David Schiff, Wenyun Xin, Jae K. Lee, Benjamin Purrow, James Christensen, Emanuel Petricoin, and Roger Abounader

Synergistic Activity of Bortezomib and HDACi in Preclinical Models of B-cell Precursor Acute Lymphoblastic Leukemia via Modulation of p53, PI3K/AKT, and NF-κB
Lorenz Bastian, Jana Hof, Madlen Pfau, Iduna Fichtner, Cornelia Eckert, Günter Henze, Javier Prada, Arend von Stackelberg, Karl Seeger, and Shabnam Shalapour

Contribution of OATP1B1 and OATP1B3 to the Disposition of Sorafenib and Sorafenib-Glucuronide
Eric I. Zimmerman, Shuiliang Hu, Justin L. Roberts, Alice A. Gibson, Shelley J. Orwick, Lie Li, Alex Sparreboom, and Sharyn D. Baker

Human Regulatory T Cells Do Not Suppress the Antitumor Immunity in the Bone Marrow: A Role for Bone Marrow Stromal Cells in Neutralizing Regulatory T Cells
Teun Guichelaar, Maarten E. Emmelot, Henk Rozemuller, Bianka Martini, Richard W.J. Groen, Gert Storm, Henk M. Lokhorst, Anton C. Martens, and Tuna Mutis

Effective Anti-Neu—Initiated Antitumor Responses Require the Complex Role of CD4+ T Cells
Eric D. Mortenson, SaeGwang Park, Zhujun Jiang, Shengdian Wang, and Yang-Xin Fu

18F-Fluorodeoxyglucose Positron Emission Tomography in the Management of Patients with Thymic Epithelial Tumors
Anish Thomas, Esther Mena, Karen Kurdziel, David Venzon, Sean Khozin, Arlene W. Berman, Peter Choyke, Eva Szabo, Arun Rajan, and Giuseppe Giaccone

Molecular Photoacoustic Imaging of Follicular Thyroid Carcinoma
Jelena Levi, Sri-Rajashekar Kothapalli, Sarah Bohndiek, Jooon-Kee Yoon, Anca Dragulescu-Andrasi, Carsten Nielsen, Aleksandra Tisma, Sunil Bodapati, Gayatri Gowrishankar, Xinrui Yan, Carmel Chan, Daniela Starcevic, and Sanjiv Sam Gambhir

Number of Target Lesions for EASL and Modified RECIST to Predict Survivals in Hepatocellular Carcinoma Treated with Chemoembolization
Beom Kyung Kim, Seung Up Kim, Myeong-Jin Kim, Kyung Ah Kim, Do Young Kim, Jun Yong Park, Sang Hoon Ahn, Kwang-Hyub Han, and Chae Yoon Chon
See commentary, p. 1312

Preclinical and Clinical Studies of Gamma Secretase Inhibitors with Docetaxel on Human Breast Tumors
Anne F. Schott, Melissa D. Landis, Gabriela Dontu, Kent A. Griffith, Rachel M. Layman, Ian Krop, Lacey A. Paskett, Helen Wong, Lacey E. Dobrolecki, Michael T. Lewis, Amber M. Froehlich, Jaya Paranilam, Daniel F. Hayes, Max S. Wicha, and Jenny C. Chang

Targeting of 111In-Labeled Dendritic Cell Human Vaccines Improved by Reducing Number of Cells
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1547</td>
<td>Castration Therapy Results in Decreased Ku70 Levels in Prostate Cancer</td>
<td>Firas L. T. Al-Ubaidi, Niklas Schultz, Olga Loseva, Lars Egevad, Torvald Granfors, and Thomas Hellday</td>
</tr>
<tr>
<td>1557</td>
<td>Efficacy, Safety, Pharmacokinetics, and Biomarkers of Cediranib Monotherapy in Advanced Hepatocellular Carcinoma: A Phase II Study</td>
<td>Andrew X. Zhu, Marek Ancukiewicz, Jeffrey G. Supko, Dushyant V. Sahani, Lawrence S. Blazekowsky, Jeffrey A. Meyerhardt, Thomas A. Abrams, Nadine Jackson McCleary, Pankaj Bhargava, Alona Muzikansky, Susan Sheehan, Eileen Regan, Emala Vasudev, Michelle Knowles, Charles S. Fuchs, David P. Ryan, Rakesh K. Jain, and Dan G. Duda</td>
</tr>
<tr>
<td>1567</td>
<td>Phase I Study of GRN1005 in Recurrent Malignant Glioma</td>
<td>Jan Drappatz, Andrew Brenner, Eric T. Wong, April Eichler, David Schiff, Morris D. Groves, Tom Mikkelson, Steve Rosenfeld, John Sarantopoulos, Christina A. Meyers, Robert M. Fielding, Kelly Elian, Xiaolin Wang, Betty Lawrence, Mona Shing, Stephen Kelsey, Jean Paul Castaigne, and Patrick Y. Wen</td>
</tr>
<tr>
<td>1587</td>
<td>Biomarker Analysis of Neoadjuvant Doxorubicin/Cyclophosphamide Followed by Irinotecan or Paclitaxel in Early-Stage Breast Cancer</td>
<td>Christine E. Horak, Lajos Pusztai, Guan Xing, Ovidiu C. Trifan, Cristina Saura, Ling-Ming Tseng, Stephen Chan, Rosanne Welcher, and David Liu</td>
</tr>
<tr>
<td>1596</td>
<td>Establishment and Validation of Circulating Tumor Cell–Based Prognostic Nomograms in First-Line Metastatic Breast Cancer Patients</td>
<td>Antonio Giordano, Brian L. Egleston, David Hajage, Joseph Bland, Gabriel N. Hortohagyi, James M. Reuben, Jean-Yves Pierga, Massimo Cristofanilli, and Francois-Clement Bidard</td>
</tr>
<tr>
<td>1603</td>
<td>CHFR Protein Expression Predicts Outcomes to Taxane-Based First Line Therapy in Metastatic NSCLC</td>
<td>Rathi N. Pillai, Seth A. Brodie, Gabriel L. Sica, You Shaojin, Ge Li, Dana C. Nickleach, Liu Yuan, Vijay A. Varma, Dacian Bonta, James G. Herman, Malcolm V. Brock, Maria I.A. Ribeiro, Suresh S. Ramalingam, Taofeek K. Owonikoko, Fadlo R. Khuri, and Johann C. Brandes</td>
</tr>
</tbody>
</table>
ABOUT THE COVER

The microphotograph shows the induction of apoptosis after combined treatment with bortezomib and the histone deacetylase inhibitor valproic acid in a xenograft mouse model of acute lymphoblastic leukemia (ALL). Human B-cell precursor ALL cells were injected subcutaneously into nonobese diabetic/severe combined immunodeficient mice. Tumor sections after treatments were stained with mAbs against human CD10 (red) indicating leukemia cells, cleaved caspase-3 (green) indicating apoptotic cells, and 4',6-diamidino-2-phenylindole (nuclei, blue). For details, please see the article by Bastian and colleagues on page 1445 of this issue.