# Clinical Cancer Research

## Table of Contents

October 1, 2014 • Volume 20 • Number 19

### Highlights of This Issue 4975

### SPECIAL FEATURES

#### Editorial

4977  
*AACR Cancer Progress Report 2014: Transforming Lives Through Research*  
Jesse Potash and Kenneth C. Anderson

#### Policy Statement

4978  
*Reliable and Effective Diagnostics Are Keys to Accelerating Personalized Cancer Medicine and Transforming Cancer Care: A Policy Statement from the American Association for Cancer Research*  
Charles L. Sawyers and Laura J. van ‘t Veer

### CCR Translations

4982  
*The Future of Cancer Therapy: Selecting Patients Likely to Respond to PD1/L1 Blockade*  
Antoni Ribas and Paul C. Tumeh  
*See related article, p. 5064*

### CCR New Strategies

4985  
*New Strategies in Acute Promyelocytic Leukemia: Moving to an Entirely Oral, Chemotherapy-Free Upfront Management Approach*  
Amer M. Zeidan and Steven D. Gore

### CCR Perspectives in Drug Approval

4994  
*FDA Approval Summary: Vemurafenib for Treatment of Unresectable or Metastatic Melanoma with the BRAFV600E Mutation*  
Geoffrey Kim, Amy E. McKee, Yang-Min Ning, Maitreeee Hazerika, Marc Theoret, John R. Johnson, Qiang Casey Xu, Shenghui Tang, Rajeshwari Sridhara, Xiaoping Jiang, Kun He, Donna Roscoe, W. David McGuinn, Whitney S. Helms, Anne Marie Russell, Sarah Pope Mikinski, Jeanne Fourie Zirkelbach, Justin Earp, Qi Liu, Amna Ibrahim, Robert Justice, and Richard Pazdur

### Molecular Pathways

5001  
*Molecular Pathways: Deregulation of Histone H3 Lysine 27 Methylation in Cancer—Different Paths, Same Destination*  
Teresa Ezponda and Jonathan D. Licht

### CANCER THERAPY: CLINICAL

5009  
*A Recombinant Modified Vaccinia Ankara Vaccine Encoding Epstein–Barr Virus (EBV) Target Antigens: A Phase I Trial in UK Patients with EBV-Positive Cancer*  

5023  
*Phase II Study of Bevacizumab, Temozolomide, and Hypofractionated Stereotactic Radiotherapy for Newly Diagnosed Glioblastoma*  

5032  
*Phase I First-in-Human Study of CUDC-101, a Multitargeted Inhibitor of HDACs, EGFR, and HER2 in Patients with Advanced Solid Tumors*  
Toshib Shimizu, Patricia M. LoRusso, Kyri P. Papadopoulos, Amita Patnaik, Muralidhar Beeram, Lon S. Smith, Drew W. Rasco, Theresa A. Mays, Glenda Chambers, Anna Ma, Jing Wang, Robert Laliberte, Maurizio Voi, and Anthony W. Tolcher
## Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5052</td>
<td>Prolongation of Overall Survival in Advanced Lung Adenocarcinoma Patients with the XAGE1 (GAGED2a) Antibody</td>
<td>Yoshihiro Ohue, Koji Kurose, Yu Mizote, Hirofumi Matsumoto, Yumi Nishio, Midori Isobe, Minoru Fukuda, Akiko Uenaka, Mikio Oka, and Eiichi Nakayama</td>
</tr>
<tr>
<td>5064</td>
<td>Association of PD-1, PD-1 Ligands, and Other Features of the Tumor Immune Microenvironment with Response to Anti–PD-1 Therapy</td>
<td>Janis M. Taube, Alison Klein, Julie R. Brahmer, Haiying Xu, Xiaoyu Pan, Jung H. Kim, Lieping Chen, Drew M. Fardoll, Suzanne L. Topalian, and Robert A. Anders</td>
</tr>
</tbody>
</table>

**PERSONALIZED MEDICINE AND IMAGING**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5064</td>
<td>Association of PD-1, PD-1 Ligands, and Other Features of the Tumor Immune Microenvironment with Response to Anti–PD-1 Therapy</td>
<td>Janis M. Taube, Alison Klein, Julie R. Brahmer, Haiying Xu, Xiaoyu Pan, Jung H. Kim, Lieping Chen, Drew M. Fardoll, Suzanne L. Topalian, and Robert A. Anders</td>
</tr>
<tr>
<td>5075</td>
<td>Anti-CCR4 Monoclonal Antibody Mogamulizumab for the Treatment of EBV-Associated T- and NK-Cell Lymphoproliferative Diseases</td>
<td>Tetsuhiro Kanazawa, Yutaka Hiramatsu, Seiko Iwata, Mohammed Siddiquay, Yoshitaka Sato, Michio Suzuki, Yoshinori Ito, Fumi Goshima, Takayuki Murata, and Hiroshi Kimura</td>
</tr>
<tr>
<td>5085</td>
<td>Combined Inhibition of Wee1 and PARP1/2 for Radiosensitization in Pancreatic Cancer</td>
<td>David Karnak, Carl G. Engelke, Leslie A. Parsels, Tanseem Kausar, Dongping Wei, Jordan R. Robertson, Katherine B. Marsh, Mary A. Davis, Lili Zhao, Jonathan Maybaum, Theodore S. Lawrence, and Meredith A. Morgan</td>
</tr>
<tr>
<td>5097</td>
<td>Overexpression of Smad7 Blocks Primary Tumor Growth and Lung Metastasis Development in Osteosarcoma</td>
<td>Audrey Lamora, Julie Talbot, Gwenola Bougras, Jérôme Amiaud, Marion Leduc, Julie Chesneau, Julien Taurelle, Verena Stresing, Marie Cécile Le Deley, Marie Françoise Heymann, Dominique Heymann, Françoise Redini, and Franck Verrecchia</td>
</tr>
</tbody>
</table>

**BIOLOGY OF HUMAN TUMORS**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5113</td>
<td>Clinical Implications of Phosphorylated STAT3 Expression in De Novo Diffuse Large B-cell Lymphoma</td>
<td>Chi Young Ok, Jiayu Chen, Zijian Y. Xu-Monette, Alexandar Tzankov, Ganrajra C. Manyam, Ling Li, Carlo Visco, Santiago Montes-Moreno, Karen Dybkær, April Chiu, Attilio Orazi, Youli Zu, Govind Bhagat, Kristy L. Richards, Eric D. Hsi, William W.L. Choi, J. Han van Krieken, Jooryung Huh, Xiaoying Zhao, Maurilio Ponzoni, Andres J.M. Ferreri, Francesco Bertoni, John P. Farnen, Michael B. Möller, Miguel A. Piris, Jane N. Winter, L. Jeffrey Medeiros, and Ken H. Young</td>
</tr>
<tr>
<td>5124</td>
<td>Low PIAS3 Expression in Malignant Mesothelioma Is Associated with Increased STAT3 Activation and Poor Patient Survival</td>
<td>Snehal Dabir, Amy Kluge, Adam Kresak, Michael Yang, Pingfu Fu, Bernd Groner, Gary Wildes, and Afshin Dowlati</td>
</tr>
<tr>
<td>5133</td>
<td>The Prostate Cancer Susceptibility Variant rs2735839 Near KLK3 Gene Is Associated with Aggressive Prostate Cancer and Can Stratify Gleason Score 7 Patients</td>
<td>Yonggang He, Jian Gu, Sara Strom, Christopher J. Logothetis, Jeri Kim, and Xifeng Wu</td>
</tr>
</tbody>
</table>

**LETTERS TO THE EDITOR**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
</table>
Tumor Stromal Phenotypes Define VEGF Sensitivity—Response

Correction: A Severe Combined Immunodeficient–hu In Vivo Mouse Model of Human Primary Mantle Cell Lymphoma

ABOUT THE COVER
The cover shows acetylated histone H3 immunohistochemistry staining of skin biopsy at half an hour after the fifth doses of CUDC-101 treatment in the 275-mg/m² cohort. CUDC-101 induces the accumulation of acetylated histone H3. For details, see the article by Shimizu and colleagues on page 5032 of this issue.