### Highlights of This Issue 1619

#### EDITORIAL

1621 **Toward a New Era in Cancer Treatment: Message from the New Editor-in-Chief**

John C. Reed

#### SPOTLIGHT IN CLINICAL RESPONSE

1623 **Sustained Remission of Multicentric Castleman Disease in Children Treated with Tocilizumab, an Anti-Interleukin-6 Receptor Antibody**

Caroline Galeotti, Adeline Boucheron, Séverine Guillaumé, and Isabelle Kose-Paut

#### REVIEW

1627 **DNA Damage Repair Pathways in Cancer Stem Cells**

Marcello Maugeri-Saccà, Monica Bartucci, and Ruggero De Maria

#### THERAPEUTIC DISCOVERY

1637 **SAR131675, a Potent and Selective VEGFR-3–TK Inhibitor with Antilymphangiogenic, Antitumoral, and Antimetastatic Activities**

Antoine Alam, Isabelle Blanc, Geneviève Gueguen-Dorbes, Olivier Duclos, Jacques Bonnin, Pauline Barron, Marie-Claude Laplace, Gaelle Morin, Florence Gaujarengues, Frédérique Dol, Jean-Pascal Héraut, Paul Schaeffer, Pierre Savi, and Françoise Bono

1650 **MEDI0639: A Novel Therapeutic Antibody Targeting DLL4 Modulates Endothelial Cell Function and Angiogenesis In Vivo**


1661 **Cotargeting Stress-Activated Hsp27 and Autophagy as a Combinatorial Strategy to Amplify Endoplasmic Reticular Stress in Prostate Cancer**

Masafumi Kumano, Junya Furukawa, Masaki Shiota, Anousheh Zardan, Fan Zhang, Eliana Beraldi, Romina M. Wiedmann, Ladan Fazli, Amina Zoubeidi, and Martin E. Gleave

1672 **A Small-Molecule Inhibitor of Glucose Transporter 1 Downregulates Glycolysis, Induces Cell-Cycle Arrest, and Inhibits Cancer Cell Growth In Vitro and In Vivo**

Yi Liu, Yan Yanyan Cao, Weihe Zhang, Stephen Bergmeier, Yanrong Qian, Huzoor Akbar, Robert Colvin, Juan Ding, Lingying Tong, Shiyong Wu, Jennifer Hines, and Xiaozhuo Chen

1683 **Targeting Subcellular Localization through the Polo-Box Domain: Non-ATP Competitive Inhibitors Recapitulate a PLK1 Phenotype**

Campbell McInnes, Kara Estes, Merissa Baxter, Zhengguan Yang, Doaa Boshra Farag, Paul Johnston, John S. Lazo, Jianjun Wang, and Michael D. Wyatt

1693 **New Use for an Old Drug: Inhibiting ABCG2 with Sorafenib**

Yinxian Wei, Yuanfang Ma, Qing Zhao, Zhiguan Ren, Yan Li, Tingjun Hou, and Hui Peng

1703 **Growth Inhibition of Ovarian Tumor–Initiating Cells by Niclosamide**

Yi-Te Yo, Ya-Wen Lin, Yu-Chi Wang, Curt Balch, Rui-Lan Huang, Michael W.Y. Chan, Huey-Kang Sytwu, Chi-Kuan Chen, Cheng-Chang Chang, Kenneth P. Nephew, Tim Huang, Mu-Hsien Yu, and Hung-Cheng Lai
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1713</td>
<td><strong>REST Is a Novel Prognostic Factor and Therapeutic Target for Medulloblastoma</strong></td>
<td>Pete Taylor, Jason Fangusaro, Veena Rajaram, Stewart Goldman, Irene B. Helenowski, Tobey MacDonald, Martin Hasselblatt, Lars Riedemann, Alvaro Laureano, Laurence Cooper, and Vidya Gopalakrishnan</td>
<td></td>
</tr>
<tr>
<td>1735</td>
<td>Molecular Mechanisms Involved in the Synergistic Interaction of the EZH2 Inhibitor 3-Deazaneplanocin A with Gemcitabine in Pancreatic Cancer Cells</td>
<td>Amir Avan, Francesco Crea, Elisa Paolicchi, Nicola Funel, Elena Galvani, Victor E Marquez, Richard J. Honeywell, Romano Danesi, Godefridus J. Peters, and Elisa Giovannetti</td>
<td></td>
</tr>
<tr>
<td>1758</td>
<td>Targeting the PI3K/mTOR Axis, Alone and in Combination with Autophagy Blockade, for the Treatment of Malignant Peripheral Nerve Sheath Tumors</td>
<td>Markus P. Ghadimi, Gonzalo Lopez, Keila E. Torres, Roman Belousov, Eric D. Young, Jeffery Liu, Kari J. Brewer, Aviad Hoffman, Kristelle Lusby, Alexander J. Lazar, Raphael E. Pollock, and Dina Lev</td>
<td></td>
</tr>
<tr>
<td>1770</td>
<td>Sorafenib Inhibits Many Kinase Mutations Associated with Drug-Resistant Gastrointestinal Stromal Tumors</td>
<td>Michael C. Heinrich, Adrian Marino-Enriquez, Ajia Presnell, Rachel S. Donsky, Diana J. Griffith, Arin McKinley, Janice Patterson, Takahiro Taguchi, Cher-Wei Liang, and Jonathan A. Fletcher</td>
<td></td>
</tr>
<tr>
<td>1781</td>
<td>The Checkpoint Kinase Inhibitor AZD7762 Potentiates Chemotherapy-Induced Apoptosis of p53-Mutated Multiple Myeloma Cells</td>
<td>Heather J. Landau, Samuel C. McNeely, Yan Zhao, Helen Jenkins, Caroline J. Richardson, Celine Cano, Michele Tavecchio, Jody Barbeau, Julia Bardos, Liam Cornell, Roger J. Griffin, Keith Meneary, Andrew Slade, Pia Thommes, Niall M.B. Martin, David R. Newell, Graeme C.M. Smith, and Nicola J. Curtin</td>
<td></td>
</tr>
<tr>
<td>1789</td>
<td>Chemosensitization of Cancer Cells by KU-0060648, a Dual Inhibitor of DNA-PK and PI-3K</td>
<td>Joanne M. Munck, Michael A. Batey, Yan Zhao, Helen Jenkins, Caroline J. Richardson, Celine Cano, Michele Tavecchio, Jody Barbeau, Julia Bardos, Liam Cornell, Roger J. Griffin, Keith Meneary, Andrew Slade, Pia Thommes, Niall M.B. Martin, David R. Newell, Graeme C.M. Smith, and Nicola J. Curtin</td>
<td></td>
</tr>
<tr>
<td>1809</td>
<td>CTLA-4 Blockade Expands Infiltrating T Cells and Inhibits Cancer Cell Repopulation during the Intervals of Chemotherapy in Murine Mesothelioma</td>
<td>Licun Wu, Zhihong Yun, Tetsuzo Tagawa, Katrina Rey-McIntyre, and Marc de Perrot</td>
<td></td>
</tr>
</tbody>
</table>
Inhibition of Dendritic Cell Maturation by the Tumor Microenvironment Correlates with the Survival of Colorectal Cancer Patients following Bevacizumab Treatment
Adriana J. Michielsen, Sinead Noonan, Petra Martin, Miriam Tosetto, Joseph Marry, Monika Biniecka, Aoife A. Maguire, John M. Hyland, Kieran D. Sheahan, Diarmuid P. O'Donoghue, Hugh E. Mulcahy, David Fennelly, Elizabeth J. Ryan, and Jacintha N. O’Sullivan

ABOUT THE COVER

The polo-box domain (PBD) has critical roles in the mitotic functions of PLK1. Fragment ligated inhibitory peptides (FLIP) were generated with comparable affinity to peptide PBD inhibitors and possess antiproliferative phenotypes in cells consistent with the observed decrease in PLK1 centrosomal localization. FLIPs induced monopolar and multipolar spindles, in contrast to previously reported small molecule PBD inhibitors that display phenotypes only partially representative of PLK1 knockdown. PBD inhibitors retain high specificity for PLK1 over PLK3 and show the promise of non-ATP competitive kinase inhibitors as antitumor therapeutics. For details, see the article by McInnes and colleagues on page 1683.