

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 Guillaume, and Isabelle Koné-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 Hérault, Paul Schaeffer, Pierre Savi, and Françoise Bono

- 1650 | **MEDI0639: A Novel Therapeutic Antibody Targeting DLL4 Modulates Endothelial Cell Function and Angiogenesis *In Vivo***
David W. Jenkins, Sarah Ross, Margaret Veldman-Jones, Ian N. Foltz, Brandon C. Clavette, Kathy Manchulenko, Cath Eberlein, Jane Kendrew, Philip Petteruti, Song Cho, Melissa Damschroder, Li Peng, Dawn Baker, Neil R. Smith, Hazel M. Weir, David C. Blakey, Vahe Bedian, and Simon T. Barry

- 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, 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**
Yinxiang Wei, Yuanfang Ma, Qing Zhao, Zhiguang 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

PRECLINICAL DEVELOPMENT

- 1713 **REST Is a Novel Prognostic Factor and Therapeutic Target for Medulloblastoma**
 Pete Taylor, Jason Fangusaro, Veena Rajaram, Stewart Goldman, Irene B. Helenowski, Tobey MacDonald, Martin Hasselblatt, Lars Riedemann, Alvaro Laureano, Laurence Cooper, and Vidya Gopalakrishnan
- 1724 **Pharmacogenomic Profiling and Pathway Analyses Identify MAPK-Dependent Migration as an Acute Response to SN38 in p53 Null and p53-Mutant Colorectal Cancer Cells**
 Wendy L. Allen, Richard C. Turkington, Leanne Stevenson, Gail Carson, Vicky M. Coyle, Suzanne Hector, Philip Dunne, Sandra Van Schaeybroeck, Daniel B. Longley, and Patrick G. Johnston
- 1735 **Molecular Mechanisms Involved in the Synergistic Interaction of the EZH2 Inhibitor 3-Deazaneplanocin A with Gemcitabine in Pancreatic Cancer Cells**
 Amir Avan, Francesco Crea, Elisa Paolicchi, Nicola Funel, Elena Galvani, Victor E Marquez, Richard J. Honeywell, Romano Danesi, Godefridus J. Peters, and Elisa Giovannetti
- 1747 **Characterization of the Mechanism of Action of the Pan Class I PI3K Inhibitor NVP-BKM120 across a Broad Range of Concentrations**
 Saskia M. Brachmann, Julia Kleylein-Sohn, Swann Gaulis, Audrey Kauffmann, Marcel J.J. Blommers, Malika Kazic-Legueux, Laurent Laborde, Marc Hattenberger, Fabian Stauffer, Juliane Vaxelaire, Vincent Romanet, Chrystèle Henry, Masato Murakami, Daniel Alexander Guthy, Dario Sterker, Sebastian Bergling, Christopher Wilson, Thomas Brümmendorf, Christine Fritsch, Carlos Garcia-Echeverria, William R. Sellers, Francesco Hofmann, and Sauveur-Michel Maira
- 1758 **Targeting the PI3K/mTOR Axis, Alone and in Combination with Autophagy Blockade, for the Treatment of Malignant Peripheral Nerve Sheath Tumors**
 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

- 1770 **Sorafenib Inhibits Many Kinase Mutations Associated with Drug-Resistant Gastrointestinal Stromal Tumors**
 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
- 1781 **The Checkpoint Kinase Inhibitor AZD7762 Potentiates Chemotherapy-Induced Apoptosis of p53-Mutated Multiple Myeloma Cells**
 Heather J. Landau, Samuel C. McNeely, Jayasree S. Nair, Raymond L. Comenzo, Takashi Asai, Hillel Friedman, Suresh C. Jhanwar, Stephen D. Nimer, and Gary K. Schwartz
- 1789 **Chemosensitization of Cancer Cells by KU-0060648, a Dual Inhibitor of DNA-PK and PI-3K**
 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 Menear, Andrew Slade, Pia Thommes, Niall M.B. Martin, David R. Newell, Graeme C.M. Smith, and Nicola J. Curtin
- 1799 **The HSP90 Inhibitor, AT13387, Is Effective against Imatinib-Sensitive and -Resistant Gastrointestinal Stromal Tumor Models**
 Tomoko Smyth, Thomas Van Looy, Jayne E. Curry, Ana M. Rodriguez-Lopez, Agnieszka Wozniak, Meijun Zhu, Rachel Donsky, Jennifer G. Morgan, Mark Mayeda, Jonathan A. Fletcher, Patrick Schöffski, John Lyons, Neil T. Thompson, and Nicola G. Wallis
- 1809 **CTLA-4 Blockade Expands Infiltrating T Cells and Inhibits Cancer Cell Repopulation during the Intervals of Chemotherapy in Murine Mesothelioma**
 Licun Wu, Zhihong Yun, Tetsuzo Tagawa, Katrina Rey-McIntyre, and Marc de Perrot

1820

Phase I Study of Pazopanib in Combination with Paclitaxel and Carboplatin Given Every 21 Days in Patients with Advanced Solid Tumors

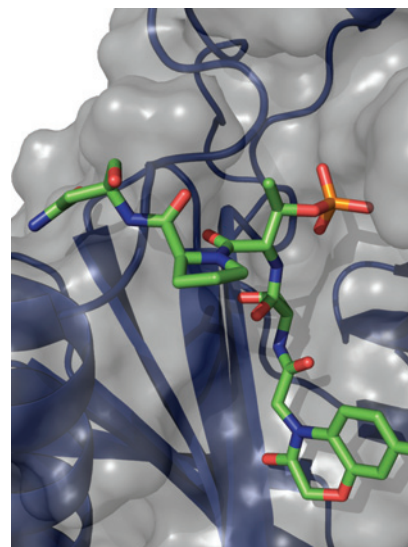
Howard A. Burris III, Afshin Dowlati, Rebecca A. Moss, Jeffrey R. Infante, Suzanne F. Jones, David R. Spigel, Kelly T. Levinson, Diana Lindquist, Shelby D. Gainer, Mohammed M. Dar, A. Benjamin Suttle, Howard A. Ball, and Antoinette R. Tan

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.



Molecular Cancer Therapeutics

11 (8)

Mol Cancer Ther 2012;11:1619-1837.

Updated version Access the most recent version of this article at:
<http://mct.aacrjournals.org/content/11/8>

E-mail alerts [Sign up to receive free email-alerts](#) related to this article or journal.

Reprints and Subscriptions To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions To request permission to re-use all or part of this article, use this link <http://mct.aacrjournals.org/content/11/8>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.