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 Kong-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

1661
Cotargeting Stress-Activated Hsp27 and Autophagy as a Combinatorial Strategy to Amplify Endoplasmic Reticular Stress in Prostate Cancer
Masafumi Kumanou, Junya Furukawa, Masaki Shiom, 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, Shiyoung Wu, Jennifer Hines, and Xiaohuozhen Chen

1683
Targeting Subcellular Localization through the Polo-Box Domain: Non-ATP Competitive Inhibitors Recapitulate a PLK1 Phenotype
Campbell McNees, 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, Zhiqiang Ren, Yan Li, Tingjin 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 Hassellblatt, Lars Riedemann, Alvaro Laureano, Laurence Cooper, and Vidy a 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

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, Godefri dus 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

1758 Targeting the PI3K/mTOR Axis, Alone and in Combination with Autophagy Blockade, for the Treatment of Malignant Peripheral Nerve Sheath Tumors

1760 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

1770 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. Come zo, Takashi Asai, Hillel Friedman, Suresh C. Jhanwar, Stephen D. Nimer, and Gary K. Schwartz

1781 Chemosensitization of Cancer Cells by KU-0060684, 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 Cornel, Roger J. Griffin, Keith Mene a, 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

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
MOLECULAR MEDICINE IN PRACTICE

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)


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, contact the AACR Publications Department at permissions@aacr.org.