

Highlights of This Issue 2675

SMALL MOLECULE THERAPEUTICS

- 2677** **Dual Metronomic Chemotherapy with Nab-Paclitaxel and Topotecan Has Potent Antiangiogenic Activity in Ovarian Cancer**
Rebecca A. Previs, Guillermo N. Armaiz-Pena, Yvonne G. Lin, Ashley N. Davis, Sunila Pradeep, Heather J. Dalton, Jean M. Hansen, William M. Merritt, Alpa M. Nick, Robert R. Langley, Robert L. Coleman, and Anil K. Sood
- 2687** **Antitumor Activity of KW-2450 against Triple-Negative Breast Cancer by Inhibiting Aurora A and B Kinases**
Kazuharu Kai, Kimie Kondo, Xiaoping Wang, Xuemei Xie, Mary K. Pitner, Monica E. Reyes, Angie M. Torres-Adorno, Hiroko Masuda, Gabriel N. Hortobagyi, Chandra Bartholomeusz, Hideyuki Saya, Debu Tripathy, Subrata Sen, and Naoto T. Ueno
- 2700** **Combined Pan-RAF and MEK Inhibition Overcomes Multiple Resistance Mechanisms to Selective RAF Inhibitors**
Steven R. Whittaker, Glenn S. Cowley, Steve Wagner, Flora Luo, David E. Root, and Levi A. Garraway
- 2712** **Targeting the Neurokinin-1 Receptor Compromises Canonical Wnt Signaling in Hepatoblastoma**
Matthias Ilmer, Agnès Garnier, Jody Vykoukal, Eckhard Alt, Dietrich von Schweinitz, Roland Kappler, and Michael Berger
- 2722** **Silibinin Preferentially Radiosensitizes Prostate Cancer by Inhibiting DNA Repair Signaling**
Dhanya K. Nambiar, Paulraj Rajamani, Gagan Deep, Anil K. Jain, Rajesh Agarwal, and Rana P. Singh
- 2735** **Efficacy of PARP Inhibitor Rucaparib in Orthotopic Glioblastoma Xenografts Is Limited by Ineffective Drug Penetration into the Central Nervous System**
Karen E. Parrish, Ling Cen, James Murray, David Calligaris, Sani Kizilbash, Rajendar K. Mittapalli, Brett L. Carlson, Mark A. Schroeder, Julieann Sludden, Alan V. Boddy, Nathalie Y.R. Agar, Nicola J. Curtin, William F. Elmquist, and Jann N. Sarkaria

- 2744** **The Sphingosine Kinase 2 Inhibitor ABC294640 Reduces the Growth of Prostate Cancer Cells and Results in Accumulation of Dihydroceramides *In Vitro* and *In Vivo***
Heather Venant, Mehrdad Rahmaniyan, E. Ellen Jones, Ping Lu, Michael B. Lilly, Elizabeth Garrett-Mayer, Richard R. Drake, Jacqueline M. Kravaka, Charles D. Smith, and Christina Voelkel-Johnson
- 2753** **Aurora A Is Critical for Survival in HPV-Transformed Cervical Cancer**
Brian Gabrielli, Fawzi Bokhari, Max V. Ranall, Zay Yar Oo, Alexander J. Stevenson, Weili Wang, Melanie Murrell, Mushfiq Shaikh, Sora Fallaha, Daniel Clarke, Madison Kelly, Karin Sedelies, Melinda Christensen, Sara McKee, Graham Leggatt, Paul Leo, Dubravka Skalamera, H. Peter Soyer, Thomas J. Gonda, and Nigel A.J. McMillan
- 2762** **BI 885578, a Novel IGF1R/INSR Tyrosine Kinase Inhibitor with Pharmacokinetic Properties That Dissociate Antitumor Efficacy and Perturbation of Glucose Homeostasis**
Michael P. Sanderson, Joshua Apgar, Pilar Garin-Chesa, Marco H. Hofmann, Dirk Kessler, Jens Quant, Alexander Savchenko, Otmar Schaaf, Matthias Treu, Heather Tye, Stephan K. Zahn, Andreas Zoephel, Eric Haaksma, Günther R. Adolf, and Norbert Kraut
- 2773** **MEK Inhibitor Selumetinib (AZD6244; ARRY-142886) Prevents Lung Metastasis in a Triple-Negative Breast Cancer Xenograft Model**
Chandra Bartholomeusz, Xuemei Xie, Mary Kathryn Pitner, Kimie Kondo, Ali Dadbin, Jangsoon Lee, Hitomi Saso, Paul D. Smith, Kevin N. Dalby, and Naoto T. Ueno

LARGE MOLECULE THERAPEUTICS


- 2782** **High-Dose FOLFIRI plus Bevacizumab in the Treatment of Metastatic Colorectal Cancer Patients with Two Different UGT1A1 Genotypes: FFCD 0504 Study**
Sylvain Manfredi, Olivier Bouché, Philippe Rougier, Laetitia Dahan, Marie Anne Lorient, Thomas Aparicio, Pierre Luc Etienne, Jean Pierre Lafargue, Cedric Lécaillon, Jean Louis Legoux, Karine Le Malicot, Emilie Maillard, Thierry Lecomte, Faiza Khemissa, Gilles Breysacher, Pierre Michel, Emmanuel Mitry, and Laurent Bedenne
- 2789** **Recombinant Immunotoxin with T-cell Epitope Mutations That Greatly Reduce Immunogenicity for Treatment of Mesothelin-Expressing Tumors**
Ronit Mazor, Jingli Zhang, Laiman Xiang, Selamawit Addissie, Prince Awuah, Richard Beers, Raffit Hassan, and Ira Pastan

Table of Contents



- 2797** Systemic Administration and Targeted Radiosensitization via Chemically Synthetic Aptamer-siRNA Chimeras in Human Tumor Xenografts
Xiaohua Ni, Yonggang Zhang, Kenji Zennami, Mark Castanares, Amarnath Mukherjee, Raju R. Raval, Haoming Zhou, Theodore L. DeWeese, and Shawn E. Lupold

CANCER BIOLOGY AND SIGNAL TRANSDUCTION

- 2805** A TORC2-Akt Feed-Forward Topology Underlies HER3 Resiliency in HER2-Amplified Cancers
Dhara N. Amin, Deepika Ahuja, Paul Yaswen, and Mark M. Moasser
- 2818** PARP Inhibitors Sensitize Ewing Sarcoma Cells to Temozolomide-Induced Apoptosis via the Mitochondrial Pathway
Florian Engert, Cornelius Schneider, Lilly Magdalena Weiß, Marie Probst, and Simone Fulda
- 2831** ERK Signal Suppression and Sensitivity to CH5183284/Debio 1347, a Selective FGFR Inhibitor
 Yoshito Nakanishi, Hideaki Mizuno, Hitoshi Sase, Toshihiko Fujii, Kiyooki Sakata, Nukinori Akiyama, Yuko Aoki, Masahiro Aoki, and Nobuya Ishii
- 2840** Pigment Epithelium-Derived Factor Alleviates Tamoxifen-Induced Endometrial Hyperplasia
Keren Goldberg, Hadas Bar-Joseph, Hadas Grossman, Noa Hasky, Shiri Uri-Belapolsky, Salomon M. Stemmer, Dana Chuderland, Ruth Shalgi, and Irit Ben-Aharon
- 2850** Potentiation of Carboplatin-Mediated DNA Damage by the Mdm2 Modulator Nutlin-3a in a Humanized Orthotopic Breast-to-Lung Metastatic Model
Eva Tonsing-Carter, Barbara J. Bailey, M. Reza Saadatzadeh, Jixin Ding, Haiyan Wang, Anthony L. Sinn, Kacie M. Peterman, Tiaishia K. Spragins, Jayne M. Silver, Alyssa A. Sprouse, Taxiarchis M. Georgiadis, T. Zachary Gunter, Eric C. Long, Robert E. Minto, Christophe C. Marchal, Christopher N. Batuello, Ahmad R. Safa, Helmut Hanenberg, Paul R. Territo, George E. Sandusky, Lindsey D. Mayo, Christine M. Eischen, Harlan E. Shannon, and Karen E. Pollok

COMPANION DIAGNOSTICS AND CANCER BIOMARKERS

- 2864** Genome-Wide Identification of a Methylation Gene Panel as a Prognostic Biomarker in Nasopharyngeal Carcinoma
Wei Jiang, Na Liu, Xiao-Zhong Chen, Ying Sun, Bin Li, Xian-Yue Ren, Wei-Feng Qin, Ning Jiang, Ya-Fei Xu, Ying-Qin Li, Jian Ren, William CS Cho, Jing-Ping Yun, Jing Zeng, Li-Zhi Liu, Li Li, Ying Guo, Hai-Qiang Mai, Mu-Sheng Zeng, Tie-Bang Kang, Wei-Hua Jia, Jian-Yong Shao, and Jun Ma
- 2874** Severely Impaired and Dysregulated Cytochrome P450 Expression and Activities in Hepatocellular Carcinoma: Implications for Personalized Treatment in Patients
Tongmeng Yan, Linlin Lu, Cong Xie, Jiamei Chen, Xiaojuan Peng, Lijun Zhu, Ying Wang, Qiang Li, Jian Shi, Fuyuan Zhou, Ming Hu, and Zhongqiu Liu
- 2887** Assessment of BRAF V600E Status in Colorectal Carcinoma: Tissue-Specific Discordances between Immunohistochemistry and Sequencing
Jeannelyn S. Estrella, Michael T. Tetzlaff, Roland L. Bassett Jr, Keyur P. Patel, Michelle D. Williams, Jonathan L. Curry, Asif Rashid, Stanley R. Hamilton, and Russell R. Broaddus
- 2896** Clinical and Translational Assessment of VEGFR1 as a Mediator of the Premetastatic Niche in High-Risk Localized Prostate Cancer
Sumanta Kumar Pal, Winston Vuong, Wang Zhang, Jiehui Deng, Xueli Liu, Courtney Carmichael, Nora Ruel, Manasvi Pinnamaneni, Przemyslaw Twardowski, Clayton Lau, Hua Yu, Robert A. Figlin, Neeraj Agarwal, and Jeremy O. Jones

MODELS AND TECHNOLOGIES

- 2901** Acute Tumor Lactate Perturbations as a Biomarker of Genotoxic Stress: Development of a Biochemical Model
Vlad C. Sandulache, Yunyun Chen, Heath D. Skinner, Tongtong Lu, Lei Feng, Laurence E. Court, Jeffrey N. Myers, Raymond E. Meyn, Clifton D. Fuller, James A. Bankson, and Stephen Y. Lai
- 2909** Acknowledgment to Reviewers


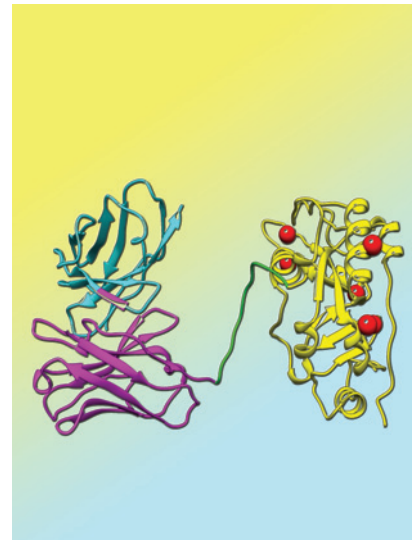
 AC icon indicates Author Choice
For more information please visit www.aacrjournals.org



Table of Contents

ABOUT THE COVER

The cover image shows the structural model of LMB-T20, a highly potent recombinant immunotoxin consisting of an antimesothelin Fv fused to a portion of *Pseudomonas* exotoxin A. The toxin has a deletion of domain II and six point mutations in domain III that delete or greatly suppress the eight T-cell epitopes. For details, see the article by Mazor and colleagues on page 2789.



Molecular Cancer Therapeutics

14 (12)

Mol Cancer Ther 2015;14:2675-2912.

Updated version Access the most recent version of this article at:
<http://mct.aacrjournals.org/content/14/12>

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/14/12>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.