

## Highlights of This Issue 1309

### SPOTLIGHT ON CLINICAL RESPONSE

- 1311 | **A Pilot Clinical Study of Treatment Guided by Personalized Tumorgrafts in Patients with Advanced Cancer**  
Manuel Hidalgo, Elizabeth Bruckheimer, N.V. Rajeshkumar, Ignacio Garrido-Laguna, Elizabeth De Oliveira, Belen Rubio-Viqueira, Steven Strawn, Michael J. Wick, James Martell, and David Sidransky

### THERAPEUTIC DISCOVERY

- 1317 | **Phenotypic Reversion of Invasive Neurofibromin-Deficient Schwannoma by FTS: Ras Inhibition Reduces BMP4/Erk/Smad Signaling**  
Batya Barkan, Yoel Kloog, and Marcelo Ehrlich
- 1327 | **Dual Targeting of Tumor Angiogenesis and Chemotherapy by Endostatin-Cytosine Deaminase-Uracil Phosphoribosyltransferase**  
Chun-Te Chen, Hirohito Yamaguchi, Hong-Jen Lee, Yi Du, Heng-Huan Lee, Weiya Xia, Wen-Hsuan Yu, Jennifer L. Hsu, Chia-Jui Yen, Hui-Lung Sun, Yan Wang, Edward T. H. Yeh, Gabriel N. Hortobagyi, and Mien-Chie Hung
- 1337 | **MicroRNA-199a-3p Is Downregulated in Human Osteosarcoma and Regulates Cell Proliferation and Migration**  
Zhenfeng Duan, Edwin Choy, David Harmon, Xianzhe Liu, Michiro Susa, Henry Mankin, and Francis Hornicek
- 1346 | **Berberine Suppresses Androgen Receptor Signaling in Prostate Cancer**  
Jing Li, Bo Cao, Xichun Liu, Xueqi Fu, Zhenggang Xiong, Li Chen, Oliver Sartor, Yan Dong, and Haitao Zhang

- 1357 | **High-Risk Endometrial Carcinoma Profiling Identifies TGF- $\beta$ 1 as a Key Factor in the Initiation of Tumor Invasion**

Laura Muinelo-Romay, Eva Colas, Jorge Barbazan, Lorena Alonso-Alconada, Marta Alonso-Nocelo, Marta Bouso, Teresa Curiel, Juan Cueva, Urbano Anido, Jeronimo Forteza, Antonio Gil-Moreno, Jaume Reventos, Rafael Lopez-Lopez, and Miguel Abal

- 1367 | **Truncated ErbB2 Expressed in Tumor Cell Nuclei Contributes to Acquired Therapeutic Resistance to ErbB2 Kinase Inhibitors**

Wenle Xia, Zuguo Liu, Rongrong Zong, Leihua Liu, Sumin Zhao, Sarah S. Bacus, Yubin Mao, Jia He, Julia D. Wulfkuhle, Emanuel F. Petricoin III, Takuya Osada, Xiao-Yi Yang, Zachary C. Hartman, Timothy M. Clay, Kimberly L. Blackwell, Herbert K. Lyerly, and Neil L. Spector

- 1375 | **Enhanced Antitumor Effects by Chemical Modified Igb3 Analogues**

Zhixia Zhou, Cai Zhang, Chengfeng Xia, Wenlan Chen, Huawei Zhu, Pingping Shang, Fang Ma, Peng George Wang, Jian Zhang, Wenfang Xu, and Zhigang Tian

### PRECLINICAL DEVELOPMENT

- 1385 | **Targeting the Mitochondria Activates Two Independent Cell Death Pathways in Ovarian Cancer Stem Cells**

Ayesha B. Alvero, Michele K. Montagna, Jennie C. Holmberg, Vinicius Craveiro, David Brown, and Gil Mor

- 1394 | **Preclinical Characterization of OSI-027, a Potent and Selective Inhibitor of mTORC1 and mTORC2: Distinct from Rapamycin**

Shripad V. Bhagwat, Prafulla C. Gokhale, Andrew P. Crew, Andy Cooke, Yan Yao, Christine Mantis, Jennifer Kahler, Jennifer Workman, Mark Bittner, Lorina Dudkin, David M. Epstein, Neil W. Gibson, Robert Wild, Lee D. Arnold, Peter J. Houghton, and Jonathan A. Pachter

- 1407 **Enhanced Efficacy of IGF1R Inhibition in Pediatric Glioblastoma by Combinatorial Targeting of PDGFR $\alpha$ / $\beta$**   
Aleksandra Bielen, Lara Perryman, Gary M. Box, Melanie Valenti, Alexis de Haven Brandon, Vanessa Martins, Alexa Jury, Sergey Popov, Sharon Gowan, Sebastien Jeay, Florence I. Raynaud, Francesco Hofmann, Darren Hargrave, Suzanne A. Eccles, and Chris Jones
- 1419 **Peloruside- and Laulimalide-Resistant Human Ovarian Carcinoma Cells Have  $\beta$ I-Tubulin Mutations and Altered Expression of  $\beta$ II- and  $\beta$ III-Tubulin Isoforms**  
Arun Kanakkanthara, Anja Wilmes, Aurora O'Brate, Daniel Escuin, Ariane Chan, Ada Gjyzezi, Janet Crawford, Pisana Rawson, Bronwyn Kivell, Peter T. Northcote, Ernest Hamel, Paraskevi Giannakakou, and John H. Miller
- 1430 **Sodium Butyrate Inhibits the Self-Renewal Capacity of Endometrial Tumor Side-Population Cells by Inducing a DNA Damage Response**  
Kiyoko Kato, Aya Kuhara, Tomoko Yoneda, Takafumi Inoue, Tomoka Takao, Tatsuhiro Ohgami, Li Dan, Ayumi Kuboyama, Soshi Kusunoki, Satoru Takeda, and Norio Wake
- 1440 ***In Vivo* Activity of Combined PI3K/mTOR and MEK Inhibition in a *Kras*<sup>G12D</sup>;*Pten* Deletion Mouse Model of Ovarian Cancer**  
Kathryn M. Kinross, Daniel V. Brown, Margarete Kleinschmidt, Susan Jackson, James Christensen, Carleen Cullinane, Rodney J. Hicks, Ricky W. Johnstone, and Grant A. McArthur
- 1450 **Levels of p27 Sensitize to Dual PI3K/mTOR Inhibition**  
Misu Lee, Marily Theodoropoulou, Jochen Graw, Federico Roncaroli, Maria Chiara Zatelli, and Natalia S. Pellegata
- 1460 **Combinatorial Effects of Lapatinib and Rapamycin in Triple-Negative Breast Cancer Cells**  
Tongrui Liu, Rami Yacoub, LaTonia D. Taliaferro-Smith, Shi-Yong Sun, Tisheeka R. Graham, Ryan Dolan, Christine Lobo, Mourad Tighiouart, Lily Yang, Amy Adams, and Ruth M. O'Regan
- 1470 **Restitution of Tumor Suppressor MicroRNAs Using a Systemic Nanovector Inhibits Pancreatic Cancer Growth in Mice**  
Dipankar Pramanik, Nathaniel R. Campbell, Collins Karikari, Raghu Chivukula, Oliver A. Kent, Joshua T. Mendell, and Anirban Maitra
- 1481 **Trabectedin and Its C Subunit Modified Analogue PM01183 Attenuate Nucleotide Excision Repair and Show Activity toward Platinum-Resistant Cells**  
Daniele G. Soares, Miriana S. Machado, Céline J. Rocca, Virginie Poindessous, Djamila Ouaret, Alain Sarasin, Carlos M. Galmarini, João A. P. Henriques, Alexandre E. Escargueil, and Annette K. Larsen
- 1490 **Molecular and Cellular Pharmacology of the Novel Noncamptothecin Topoisomerase I Inhibitor Genz-644282**  
Dhriti Sooryakumar, Thomas S. Dexheimer, Beverly A. Teicher, and Yves Pommier
- 1500 **Neutralizing Monoclonal Antibody to Periostin Inhibits Ovarian Tumor Growth and Metastasis**  
Min Zhu, Romaine E. Saxton, Lillian Ramos, David D. Chang, Beth Y. Karlan, Judith C. Gasson, and Dennis J. Slamon

## MOLECULAR MEDICINE IN PRACTICE

- 1509 **Rationally Designed Treatment for Solid Tumors with MAPK Pathway Activation: A Phase I Study of Paclitaxel and Bortezomib Using an Adaptive Dose-Finding Approach**  
Janice M. Mehnert, Antoinette R. Tan, Rebecca Moss, Elizabeth Poplin, Mark N. Stein, Mika Sovak, Kelly Levinson, Hongxia Lin, Michael Kane, Murugesan Gounder, Yong Lin, Weichung Joe Shih, Eileen White, Eric H. Rubin, and Vassiliki Karantza
- 1520 **Melanoma Prognosis: A REMARK-Based Systematic Review and Bioinformatic Analysis of Immunohistochemical and Gene Microarray Studies**  
Sarah-Jane Schramm and Graham J. Mann

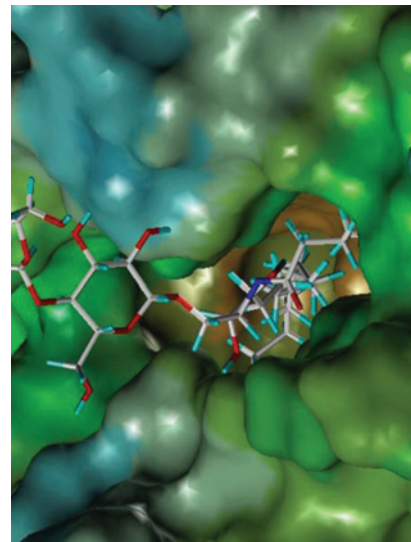
## CORRECTION

- 1529 **Correction: Targeting Oncogenic ALK: A Promising Strategy for Cancer Treatment**

---

## ABOUT THE COVER

Modification of the glycolipid ligands for natural killer T (NKT) cells might be an efficient approach to improve their stimulatory activity or to shift the proportional release of Th1 and Th2 cytokines. The chemical modified iGb3 analogue, 4'''-dh-iGb3, made by introducing a hydroxyl group at C4 of iGb3 and removing the 4''' hydroxyl group of the terminal galactose, could increase the stability of the CD1d/antigen/TCR ternary complex and IFN- $\gamma$  signaling of NKT cells, and thus stimulate more IFN- $\gamma$  production by NKT cells. 4'''-dh-iGb3-loaded dendritic cells significantly inhibit growth of subcutaneous melanoma and suppress lung metastasis in C57BL/6 mice. The 4'''-dh-iGb3-loaded dendritic cell vaccine may serve as a potent new NKT-based therapy against tumors. For details, see article by Zhou and colleagues on page 1375.



# Molecular Cancer Therapeutics

**10 (8)**

*Mol Cancer Ther* 2011;10:1309-1529.

**Updated version** Access the most recent version of this article at:  
<http://mct.aacrjournals.org/content/10/8>

**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](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link <http://mct.aacrjournals.org/content/10/8>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.