Highlights of This Issue 2823

REVIEW
2825  Mechanisms of Resistance to Antibody–Drug Conjugates
Frank Loganzo, Matthew Sung, and Hans-Peter Gerber

SMALL MOLECULE THERAPEUTICS
2835  Ibrutinib Inhibits ERBB Receptor Tyrosine Kinases and HER2-Amplified Breast Cancer Cell Growth
Jun Chen, Taisei Kinoshita, Juthamas Sukbuntheng, Betty Y. Chang, and Laurence Elias
2845  Cabozantinib Is Active against Human Gastrointestinal Stromal Tumor Xenografts Carrying Different KIT Mutations
Yemarshet K. Gebreyohannes, Patrick Schoffski, Thomas Van Looy, Jasmien Wellens, Lise Vreys, Jasmien Cornillie, Ulla Vanleeuw, Dana T. Aftab, Maria Debrie-Bychier, Raf Sciot, and Agnieszka Wozniak
2853  Novel ABCG2 Antagonists Reverse Topotecan-Mediated Chemotherapeutic Resistance in Ovarian Carcinoma Xenografts
Jerec W. Ricci, Debbie M. Lovato, Virginia Severns, Larry A. Sklar, and Richard S. Larson
2863  Fisetin Enhances Chemotherapeutic Effect of Cabazitaxel against Human Prostate Cancer Cells
Eiman Mukhtar, Vaqar Mustafa Adhami, Imtiaz Ahmad Siddiqui, Ajit Kumar Verma, and Hasan Mukhtar
2875  Mitochondrial Targeting of Metformin Enhances Its Activity against Pancreatic Cancer
Stepana Boukalova, Jan Stursa, Lukas Werner, Zuzana Ezrova, Jiri Cerny, Ayenachew Bezawork-Geleta, Alena Pecinova, Lanfeng Dong, Zdenek Drahota, and Jiri Neuzil
2887  Reactivation of p53 by MDM2 Inhibitor MI-77301 for the Treatment of Endocrine-Resistant Breast Cancer
Jianfeng Lu, Donna McEachern, Shunqiang Li, Matthew J. Ellis, and Shaomeng Wang

LARGE MOLECULE THERAPEUTICS
2946  Development of a Novel Antibody–Drug Conjugate for the Potential Treatment of Ovarian, Lung, and Renal Cell Carcinoma Expressing TIM-1
Knockdown of Apolipoprotein E Enhanced Sensitivity of Hep3B Cells to Cardiac Steroids via Regulating Na⁺/K⁺-ATPase Signalosome

Miao Liu, Li-Xing Feng, Peng Sun, Wang Liu, Tian Mi, Min Lei, Wanying Wu, Baosheng Jiang, Min Yang, Libong Hu, De-An Guo, and Xuan Liu

Ascochlorin Enhances the Sensitivity of Doxorubicin Leading to the Reversal of Epithelial-to-Mesenchymal Transition in Hepatocellular Carcinoma

Xiaoyun Dai, Kwang Seok Ahn, Ling Zhi Wang, Chulwon Kim, Anudha Deivasigammi, Frank Arfuso, Jae-Young Um, Alan Prem Kumar, Young-Chae Chang, Dhiraj Kumar, Gopal C. Kundu, Junji Magae, Boon Cher Goh, Kam Man Hui, and Gautam Sethi

The Potential Roles of Long Noncoding RNAs (IncRNA) in Glioblastoma Development

Shuang Liu, Ramkrishna Mitra, Ming-Ming Zhao, Wenhong Fan, Christine M. Eischen, Feng Yin, and Zhongming Zhao

The BRAF Inhibitor Vemurafenib Activates Mitochondrial Metabolism and Inhibits Hyperpolarized Pyruvate–Lactate Exchange in BRAF-Mutant Human Melanoma Cells

Teresa Delgado-Goni, Maria Falck Miniotis, Slawomir Wantuch, Harold G. Parkes, Richard Marais, Paul Workman, Martin O. Leach, and Mounia Beloueche-Babari

Alkylating Agent–Induced NRF2 Blocks Endoplasmic Reticulum Stress–Mediated Apoptosis via Control of Glutathione Pools and Protein Thiol Homeostasis

Alfeu Zanotto-Filho, V. Pragathi Masamsetti, Eva Loranc, Sonal S. Tonapi, Aparna Gorthi, Xavier Bernard, Rosangela Mayer Gonçalves, Josué C.F. Moreira, Yidong Chen, and Alexander J.R. Bishop

Mutant BRAF Upregulates MCL-1 to Confer Apoptosis Resistance that Is Reversed by MCL-1 Antagonism and Cobimetinib in Colorectal Cancer

Hisato Kawakami, Shengbing Huang, Krishnendu Pal, Shamit K. Dutta, Debabrata Mukhopadhyay, and Frank A. Sinicrope

Oncogenic Receptor Tyrosine Kinases Directly Phosphorylate Focal Adhesion Kinase (FAK) as a Resistance Mechanism to FAK-Kinase Inhibitors

Timothy A. Marlowe, Felicia L. Lenzo, Sheila A. Figel, Abigail T. Grapes, and William G. Cance

Acquired Resistance Mechanisms to Combination Met-TKI/EGFR-TKI Exposure in Met-Amplified EGFR-TKI–Resistant Lung Adenocarcinoma Harboring an Activating EGFR Mutation

Toshiimitsu Yamaoka, Tohru Ohnori, Motsu Ohba, Satoru Arata, Yasunari Kishino, Yasunori Murata, Sojiro Kusumoto, Hiroo Ishida, Takao Shirai, Takashi Hirose, Tsukasa Ohnishi, and Yasutsuna Sasaki

STAT1 Promotes KRAS Colon Tumor Growth and Susceptibility to Pharmacological Inhibition of Translation Initiation Factor eIF4A

Shao Wang, Cedric Darini, Laurent Désaubry, and Antonis E. Koromilas

Dedifferentiation of Glioma Cells to Glioma Stem-like Cells By Therapeutic Stress-induced HIF Signaling in the Recurrent GBM Model

Gina Lee, Brenda Auffinger, Donna Guo, Tanvir Hasan, Marc Deheeger, Alex L. Tobias, Jeong Yeon Kim, Fatemeh Atashi, Lingjiao Zhang, Maciej S. Lesniak, C. David James, and Atique U. Ahmed

Macrophage Susceptibility to Emactuzumab (RG7155) Treatment

Leon P. Pradel, Chia-Huey Ooi, Solange Romagnoli, Michael A. Cannarile, Dominik Ruttinger, and Carola H. Ries

ATM Expression Predicts Veliparib and Irinotecan Sensitivity in Gastric Cancer by Mediating P53-Independent Regulation of Cell Cycle and Apoptosis

Vinod Vijay Subhash, Shi Hui Tan, Mei Shi Yeo, Fui Leng Yan, Paavean C. Peethala, Natalia Liem, Vaidehi Krishnan, and Wei Peng Yong

Cell Panel Profiling Reveals Conserved Therapeutic Clusters and Differentiates the Mechanism of Action of Different PI3K/mTOR, Aurora Kinase and EZH2 Inhibitors

Joost C.M. Uitdehaag, Jeroen A.D.M. de Roos, Martine B.W. Prinsen, Nicole Willemsen-Seegers, Judith R.E. de Vetier, Jelle Dylus, Antoon M. van Doornmalen, Jeffrey Kooijman, Massaki Sawa, Suzanne J.C. van Gerwen, Jos de Man, Rogier C. Buijsman, and Guido J.R. Zaman
Combining Nonclinical Experiments with Translational PKPD Modeling to Differentiate Erlotinib and Gefitinib

Miro J. Eigenmann, Nicolas Frances, Gerhard Hoffmann, Thierry Lavé, and Antje-Christine Walz

Correction: Antagonists of IGF: Vitronectin Interactions Inhibit IGF-I–Induced Breast Cancer Cell Functions

Acknowledgment to Reviewers

ABOUT THE COVER

The cover image shows a Pearson correlation matrix of 51 anti-cancer agents analyzed in the Oncolines and NCI-60 cancer cell line panels (blue: high correlation, orange: negative correlation). The left triangle shows clusters and correlations using data from the Oncolines panel. The right triangle is identical to the left one, only based on NCI-60 data. Both data sets reveal similar clusters (some classes are indicated). Read more on the Oncolines™ cancer cell line profiling study in the article by Uitdehaag and colleagues from page 3097 of this issue.
Molecular Cancer Therapeutics

15 (12)


Updated version
Access the most recent version of this article at:
http://mct.aacrjournals.org/content/15/12

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/15/12. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.