Highlights of This Issue 845

REVIEW

847  PD-L1 Expression as a Predictive Biomarker in Cancer Immunotherapy
Sandip Pravin Patel and Razelle Kurzrock

SMALL MOLECULE THERAPEUTICS

857  Preclinical Pharmacological Evaluation of Letrozole as a Novel Treatment for Gliomas
Nimita Dave, Lionel M.L. Chow, Gary A. Gudelsky, Kathleen LaSance, Xiaoyang Qi, and Pankaj B. Desai

865  Functional Genetic Screen Identifies Increased Sensitivity to WEE1 Inhibition in Cells with Defects in Fanconi Anemia and HR Pathways
Marieke Aarts, Ilirjana Bajrami, Maria T. Herrera-Abreu, Richard Elliott, Rachel Brough, Alan Ashworth, Christopher J. Lord, and Nicholas C. Turner

877  ATF4 Gene Network Mediates Cellular Response to the Anticancer PAD Inhibitor YW3-56 in Triple-Negative Breast Cancer Cells
Shu Wang, Xiayun Amy Chen, Jing Hu, Jian-kang Jiang, Yunfei Li, Ka Yim Chan-Salis, Ying Gu, Gong Chen, Craig Thomas, B. Franklin Pugh, and Yanming Wang

889  The Combination of the PARP Inhibitor Rucaparib and 5FU Is an Effective Strategy for Treating Acute Leukemias
Maria Vittoria Verga Falzappa, Chiara Ronchini, Mario Faretta, Ilaria Iacobucci, Andrea Ghelli Luserna Di Rorà, Giovanni Martinelli, Luder Hinrich Meyer, Klaus-Michael Debatin, Stefania Orecchioni, Francesco Bertolini, and Pier Giuseppe Pellici

LARGE MOLECULE THERAPEUTICS

891  IKKβ Regulates VEGF Expression and Is a Potential Therapeutic Target for Ovarian Cancer as an Antiangiogenic Treatment

909  Efficacy of Carboplatin Alone and in Combination with ABT888 in Intracranial Murine Models of BRCA-Mutated and BRCA–Wild-Type Triple-Negative Breast Cancer

920  The Selective PI3K Inhibitor XL147 (SAR245408) Inhibits Tumor Growth and Survival and Potentiates the Activity of Chemotherapeutic Agents in Preclinical Tumor Models

931  New Blocking Antibodies against Novel AGR2–C4.4A Pathway Reduce Growth and Metastasis of Pancreatic Tumors and Increase Survival in Mice
Thinvengadam Arumugam, Deleng Deng, Laura Bover, Huamin Wang, Craig D. Logsdon, and Vijaya Ramachandran

April 2015 • Volume 14 • Number 4
Table of Contents

952  Tumor Cells Chronically Treated with a Trastuzumab–Maytansinoid Antibody–Drug Conjugate Develop Varied Resistance Mechanisms but Respond to Alternate Treatments

964  Nonclinical Safety Evaluation of VX15/2503, a Humanized IgG4 Anti-SEMA4D Antibody
John E. Leonard, Terrence L. Fisher, Laurie A. Winter, Chad A. Cornelius, Christine Reilly, Ernest S. Smith, and Maurice Zauderer

973  A Novel Neutralizing Antibody Targeting Pregnancy-Associated Plasma Protein-A Inhibits Ovarian Cancer Growth and Ascites Accumulation in Patient Mouse Tumorgrafts
Marc A. Becker, Paul Haluska Jr, Laurie K. Bale, Claus Oxvig, and Cheryl A. Conover

982  The IGF-Trap: Novel Inhibitor of Carcinoma Growth and Metastasis
Ni Wang, Roni F. Rayes, Seyyed Mehdy Elahi, Yifan Lu, Mark A. Hancock, Bernard Massie, Gerald E. Rowe, Hafida Aomari, Sazzad Hussain, Yves Durocher, Maxime Pimard, Sébastien Tabaries, Peter M. Siegel, and Pnina Brodt

CANCER BIOLOGY AND SIGNAL TRANSDUCTION

994  Contribution of Hepatic Organic Anion-Transporting Polypeptides to Docetaxel Uptake and Clearance
Hannah H. Lee, Brenda F. Leake, Wendy Teft, Rommel G. Tirona, Richard B. Kim, and Richard H. Ho

1004  Trifluridine Induces p53-Dependent Sustained G2 Phase Arrest with Its Massive Misincorporation into DNA and Few DNA Strand Breaks
Kazuaki Matsuoka, Makoto Iimori, Shinichiro Niimi, Hiroshi Tsukihara, Sugiko Watanabe, Shinichi Kiyonari, Mamoru Kiniwa, Koji Ando, Eriko Tokunaga, Hiroshi Saeki, Eiji Oki, Yoshihiko Maehara, and Hiroyuki Kitao

1014  Dual PI3K/mTOR Inhibitors Induce Rapid Overactivation of the MEK/ERK Pathway in Human Pancreatic Cancer Cells through Suppression of mTORC2
Heloisa P. Soares, Ming Ming, Michelle Mellion, Steven H. Young, Liang Han, James Simnet-Smith, and Enrique Rozengurt

1024  Targeting Integrin-Linked Kinase Suppresses Invasion and Metastasis through Downregulation of Epithelial-to-Mesenchymal Transition in Renal Cell Carcinoma
Kyung Seok Han, Na Li, Peter A. Raven, Ladan Fazli, Susan Ettinger, Sung Joon Hong, Martin E. Gleave, and Alan I. So

1035  Targeted Blockade of JAK/STAT3 Signaling Inhibits Ovarian Carcinoma Growth
Galina Gritsina, Fang Xiao, Shane W. O’Brien, Rashid Gabbasov, Marisa A. Maglaty, Ren-Huan Xu, Roshan J. Thapa, Yan Zhou, Emmanuelle Nicolas, Samuel Litwin, Siddharth Balachandran, Luis J. Sigal, Dennis Huszar, and Denise C. Connolly

COMPANION DIAGNOSTICS AND CANCER BIOMARKERS

1048  Biomarker Signatures Correlate with Clinical Outcome in Refractory Metastatic Colorectal Cancer Patients Receiving Bevacizumab and Everolimus
Yingmiao Liu, Mark D. Starr, John C. Brady, Christel Rushing, Anuradha Bulusu, Herbert Pang, Wanda Honeycutt, Anthony Amara, Ivy Alilomare, Hope E. Uronis, Herbert I. Hurwitz, and Andrew B. Nixon

1057  Transcriptomic and Protein Expression Analysis Reveals Clinicopathological Significance of Bloom Syndrome Helicase (BLM) in Breast Cancer
Arvind Arora, Tarek M.A. Abdel-Fatah, Devika Agarwal, Rachel Doherty, Paul M. Moseley, Mohammed A. Alekandary, Andrew R. Green, Graham Ball, Alaa T. Alshereda, Emad A. Rakha, Stephen Y.T. Chan, Ian O. Ellis, and Srinivasan Madhusudan

Downloaded from mct.aacrjournals.org on April 10, 2017. © 2015 American Association for Cancer Research.
ABOUT THE COVER

Deregulation of cell-cycle checkpoints is a feature of many different cancer types. WEE1 kinase plays an important role in the maintenance of these cell-cycle checkpoints by inhibiting cyclin-dependent kinase (CDK) activity. Through siRNA screening, it was found that cancer cells with defects in Fanconi Anemia (FA) and homologous recombination pathways were more sensitive to WEE1 inhibition. The cover image shows that WEE1 inhibition in cells depleted of FA protein FANCM resulted in increased replication stress (pan-nuclear γH2AX staining in green) and premature entry into mitosis (yellow). Phospho-histone H3 staining (red) was used to identify mitotic cells. DNA was counterstained with DAPI (blue). For details, see the article by Aarts and colleagues on page 865.