Highlights of This Issue 119

REVIEW

121 Current Preclinical Models for the Advancement of Translational Bladder Cancer Research
David J. DeGraff, Victoria L. Robinson, Jay B. Shah, William D. Brandt, Guru Sonpavde, Yibin Kang, Monica Liebert, Xue-Ru Wu, and John A. Taylor III for the Translational Science Working Group of the Bladder Advocacy Network Think Tank

CHEMICAL THERAPEUTICS

131 The Tyrosine Kinase Inhibitor E-3810 Combined with Paclitaxel Inhibits the Growth of Advanced-Stage Triple-Negative Breast Cancer Xenografts
Ezia Bello, Giulia Taraboletti, Gennaro Colella, Massimo Zucchetti, Daniele Forestieri, Simonetta A. Licandro, Alexander Berndt, Petra Richter, Maurizio D’Incalci, Ennio Cavalletti, Raffaella Giavazzi, Gabriella Camboni, and Giovanna Damia

141 WEE1 Kinase Inhibition Enhances the Radiation Response of Diffuse Intrinsic Pontine Gliomas
Viola Caretti, Lotte Hiddingh, Tonny Lagerweij, Pepijn Schellen, Phil W. Koken, Esther Hulleman, Danni S. van Vuurden, W. Peter Vandertop, Gertjan J.L. Kaspers, David P. Noske, and Thomas Wurdinger

151 VS-5584, a Novel and Highly Selective PI3K/mTOR Kinase Inhibitor for the Treatment of Cancer
Stefan Hart, Veronica Novotny-Diermayr, Koo Chuan Goh, Meredith Williams, Yong Cheng Tan, Lai Chun Ong, Albert Cheong, Bee Kheng Ng, Chithra Amalini, Babita Madan, Harish Nagaraj, Ramesh Jayaraman, Khalid M. Pasha, Kantharaj Ethirajulu, Wee Joo Chng, Nurulhuda Mustafa, Boon Cher Goh, Cyril Benes, Ulan McDermott, Mathew Garnett, Brian Dymock, and Jeanette M. Wood

CANCER THERAPEUTIC INSIGHTS

162 Pharmacologic Blockade of FAK Autophosphorylation Decreases Human Glioblastoma Tumor Growth and Synergizes with Temozolomide
Vita M. Golubovskaya, Grace Huang, Baotran Ho, Michael Yemmna, Carl D. Morrison, Jisook Lee, Brian P. Eliceiri, and William G. Cance

173 Induction of Endoplasmic Reticulum Stress by Sorafenib and Activation of NF-κB by Lestaurtinib as a Novel Resistance Mechanism in Hodgkin Lymphoma Cell Lines
Meike Stefanie Holz, Angela Janning, Christoph Renné, Stefan Gattenlohe, Tillmann Spieker, and Andreas Bräuninger

184 Triptolide Inhibits MDM2 and Induces Apoptosis in Acute Lymphoblastic Leukemia Cells through a p53-Independent Pathway
Mei Huang, Hailong Zhang, Tao Liu, Dan Tian, Lubing Gu, and Muxiang Zhou

195 Bortezomib Sensitizes Human Acute Myeloid Leukemia Cells to All-Trans-Retinoic Acid-Induced Differentiation by Modifying the RARA/STAT1 Axis
Meidan Ying, Xinglu Zhou, Like Zhong, Nengming Lin, Hui Jing, Peihua Luo, Xiaoqun Yang, Hua Song, Bo Yang, and Qiaojun He

207 miRNA-100 Inhibits Human Bladder Urothelial Carcinogenesis by Directly Targeting mTOR
Chuanliang Xu, Qin Song Zeng, Weidong Xu, Li Jiao, Yangqiong Chen, Zhenheng Zhang, Chengyao Wu, Taile Jin, An Yin Pan, Rongchao Wei, Bo Yang, and Yinghao Sun

COMPANION DIAGNOSTICS AND BIOMARKERS

220 EGFR Exon 20 Insertion Mutations in Lung Adenocarcinomas: Prevalence, Molecular Heterogeneity, and Clinicopathologic Characteristics
Maria E. Arcila, Khedoudja Nafa, Jamie E. Chaft, Natasha Rekhtman, Christopher Lau, Boris A. Reva, Maureen F. Zakowski, Mark G. Kris, and Marc Ladanyi
Antitumor Activity and Pharmacodynamic Biomarkers of a Novel and Orally Available Small-Molecule Antagonist of Inhibitor of Apoptosis Proteins
Hiroyuki Sumi, Masato Yabuki, Kenichi Iwai, Megumi Morimoto, Ryosuke Hibino, Masakazu Inazuka, Kentaro Hashimoto, Yohei Kosugi, Kazunobu Aoyama, Shunsuke Yamamoto, Mie Yoshimatsu, Hideki Yamasaki, Ryuichi Tozawa, Tomoyasu Ishikawa, and Sei Yoshida

Correction: TPI-287, a New Taxane Family Member, Reduces the Brain Metastatic Colonization of Breast Cancer Cells

ABOUT THE COVER

In silico molecular modeling of the EGFR exon 20 A763_Y764 insertion mutation. Mutations in this region are predicted to cause significant rearrangement of the C helix (yellow) but do not affect the erlotinib binding pocket directly (erlotinib shown in green). Insertions in EGFR exon 20 that are more distal (3') are expected to result in a greater obstructive effect on erlotinib binding. These predictions suggest a basis for the observed variability of response to EGFR inhibition in patients with different types of EGFR exon 20 insertions. For details, see article by Arcila and colleagues on page 220.