Highlights of This Issue 4491

SPECIAL FEATURES

Volumes to Learn: Advancing Therapeutics with Innovative Computed Tomography Image Data Analysis
Michael L. Maitland
See article p. 4647

4543
Epigenetic Modifications in Double-Strand Break DNA Damage Signaling and Repair
Dorine Rossetto, Andrew W. Truman, Stephen J. Kron, and Jacques Côté

“Contextual” Synthetic Lethality and/or Loss of Heterozygosity: Tumor Hypoxia and Modification of DNA Repair
Norman Chan and Robert G. Bristow

4553

Molecular Pathways

X-linked Inhibitor of Apoptosis: A Chemoresistance Factor or a Hollow Promise
Hamid Kashkar

Targeting Cell Division Cycle 7 Kinase: A New Approach for Cancer Therapy
Alessia Montagnoli, Jürgen Moll, and Francesco Colotta

CCR Translations

DNA Repair: A Reinvigorated Therapeutic Target
Susan E. Bates

DNA Damage and Repair in Translational Oncology: An Overview
Eddie Reed

Poly (ADP-Ribose) Polymerase as a Novel Therapeutic Target in Cancer
Christina M. Annunziata and Joyce O’Shaughnessy

Perspective on the Pipeline of Drugs Being Developed with Modulation of DNA Damage as a Target
Ruth Plummer

Histone γH2AX and Poly(ADP-Ribose) as Clinical Pharmacodynamic Biomarkers
Christophe E. Redon, Asako J. Nakamura, Yong-Wei Zhang, Jiuping (Jay) Ji, William M. Bonner, Robert J. Kinders, Ralph E. Parchment, James H. Doroshow, and Yves Pommier

CCR Focus

Regulation of Excision Repair Cross-Complementation Group 1 by Snail Contributes to Cisplatin Resistance in Head and Neck Cancer

4572
System-Level Analysis of Neuroblastoma Tumor–Initiating Cells Implicates AURKB as a Novel Drug Target for Neuroblastoma
Olena Morozova, Milijana Vojvodic, Natalie Grinshtein, Loen M. Hansford, Kim M. Blakely, Alexandra Maslova, Martin Hirst, Timothee Cezard, Ryan D. Morin, Richard Moore, Kristen M. Smith, Freda Miller, Paul Taylor, Nina Thiessen, Richard Varhol, Yongqian Zhao, Steven Jones, Jason Moffat, Thomas Kislinger, Michael E. Moran, David R. Kaplan, and Marco A. Marra

4583
A Novel Chemoimmunomodulating Property of Docetaxel: Suppression of Myeloid-Derived Suppressor Cells in Tumor Bearers
Krithika N. Kodumudi, Karrune Woan, Danielle L. Gilvary, Eva Sahakian, Sheng Wei, and Julie Y. Djeu

Inhibitory Effect of Silibinin against Azoxymethane-Induced Colon Tumorigenesis in A/J Mice
Kameswaran Ravichandhran, Balaiya Velmurugan, Mallikarjuna Gu, Rana P. Singh, and Rajesh Agarwal

4595

HUMAN CANCER BIOLOGY

4561

CANCER THERAPY: PRECLINICAL

Epigenetic Modifications in Double-Strand Break DNA Damage Signaling and Repair
Dorine Rossetto, Andrew W. Truman, Stephen J. Kron, and Jacques Côté

“Contextual” Synthetic Lethality and/or Loss of Heterozygosity: Tumor Hypoxia and Modification of DNA Repair
Norman Chan and Robert G. Bristow

4553

X-linked Inhibitor of Apoptosis: A Chemoresistance Factor or a Hollow Promise
Hamid Kashkar

Targeting Cell Division Cycle 7 Kinase: A New Approach for Cancer Therapy
Alessia Montagnoli, Jürgen Moll, and Francesco Colotta

DNA Repair: A Reinvigorated Therapeutic Target
Susan E. Bates

DNA Damage and Repair in Translational Oncology: An Overview
Eddie Reed

Poly (ADP-Ribose) Polymerase as a Novel Therapeutic Target in Cancer
Christina M. Annunziata and Joyce O’Shaughnessy

Perspective on the Pipeline of Drugs Being Developed with Modulation of DNA Damage as a Target
Ruth Plummer

Histone γH2AX and Poly(ADP-Ribose) as Clinical Pharmacodynamic Biomarkers
Christophe E. Redon, Asako J. Nakamura, Yong-Wei Zhang, Jiuping (Jay) Ji, William M. Bonner, Robert J. Kinders, Ralph E. Parchment, James H. Doroshow, and Yves Pommier
Molecular Analysis of Non–Small Cell Lung Cancer Identifies Subsets with Different Sensitivity to Insulin-like Growth Factor I Receptor Inhibition


An Open-Label, Phase I Study of the Polo-like Kinase-1 Inhibitor, BI 2536, in Patients with Advanced Solid Tumors


Expression of Receptors for Luteinizing Hormone-Releasing Hormone (LH-RH) in Prostate Cancers following Therapy with LH-RH Agonists

Stephen V. Liu, Andrew V. Schally, Debra Hawes, Shigang Xiong, Laden Fazli, Martin Gleave, Jie Cai, Susan Groshen, Frank Brands, Juergen Engel, and Jacek Pinski

Correction: A Phase I Pharmacologic Study of Necitumumab (IMC-11F8), a Fully Human IgG1 Monoclonal Antibody Directed against EGFR in Patients with Advanced Solid Malignancies

Correction: A Phase I Pharmacologic Study of Necitumumab (IMC-11F8), a Fully Human IgG1 Monoclonal Antibody Directed against EGFR in Patients with Advanced Solid Malignancies
ABOUT THE COVER

Clinical Use of γH2AX and PAR: Image of an anagen hair bulb plucked from the scalp of a cancer patient 24 hours after drug infusion. γH2AX antibody reveals DNA double-strand breaks (green foci) in cell nuclei (red). Imaged using a Nikon PCM 2000 laser scanning confocal microscope. For details, please see the article by Redon and colleagues on p. 4532 of this issue.