

Highlights of This Issue 1923

REVIEW

- 1925 | **RAC1: An Emerging Therapeutic Option for Targeting Cancer Angiogenesis and Metastasis**
Hemant K. Bid, Ryan D. Roberts, Parmeet K. Manchanda, and Peter J. Houghton

SMALL MOLECULE THERAPEUTICS

- 1935 | **Targeting Aberrant Sialylation in Cancer Cells Using a Fluorinated Sialic Acid Analog Impairs Adhesion, Migration, and *In Vivo* Tumor Growth**
Christian Büll, Thomas J. Boltje, Melissa Wassink, Annemarie M.A. de Graaf, Floris L. van Delft, Martijn H. den Brok, and Gosse J. Adema

- 1947 | **Novel Inhibitors of Cyclin-Dependent Kinases Combat Hepatocellular Carcinoma without Inducing Chemoresistance**
Christine Haider, Markus Grubinger, Eva Řezníčková, Thomas S. Weiss, Hans Rotheneder, Walter Miklos, Walter Berger, Radek Jorda, Marek Zatloukal, Tomáš Gucký, Miroslav Strnad, Vladimír Kryštof, and Wolfgang Mikulits

- 1958 | **Overcoming Platinum Resistance in Preclinical Models of Ovarian Cancer Using the Neddylaton Inhibitor MLN4924**
Amir A. Jazaeri, Etsuko Shibata, Jonghoon Park, Jennifer L. Bryant, Mark R. Conaway, Susan C. Modesitt, Peter G. Smith, Michael A. Milhollen, Allison J. Berger, and Anindya Dutta

- 1968 | **Combination Drug Scheduling Defines a “Window of Opportunity” for Chemopotiation of Gemcitabine by an Orally Bioavailable, Selective ChK1 Inhibitor, GNE-900**
Elizabeth Blackwood, Jennifer Epler, Ivana Yen, Michael Flagella, Tom O’Brien, Marie Evangelista, Stephen Schmidt, Yang Xiao, Jonathan Choi, Kaska Kowanetz, Judi Ramiscal, Kenton Wong, Diana Jakubiak, Sharon Yee, Gary Cain, Lewis Gazzard, Karen Williams, Jason Halladay, Peter K. Jackson, and Shiva Malek

- 1981 | **A Urokinase Receptor-Derived Peptide Inhibiting VEGF-Dependent Directional Migration and Vascular Sprouting**
Katia Bifulco, Immacolata Longanesi-Cattani, Eleonora Liguori, Claudio Arra, Domenica Rea, Maria Teresa Masucci, Mario De Rosa, Vincenzo Pavone, Maria Patrizia Stoppelli, and Maria Vincenza Carriero

- 1994 | **The Dual Pathway Inhibitor Rigosertib Is Effective in Direct Patient Tumor Xenografts of Head and Neck Squamous Cell Carcinomas**
Ryan T. Anderson, Stephen B. Keysar, Daniel W. Bowles, Magdalena J. Glogowska, David P. Astling, J. Jason Morton, Phuong Le, Adrian Umpierrez, Justin Eagles-Soukup, Gregory N. Gan, Brian W. Vogler, Daniel Sehr, Sarah M. Takimoto, Dara L. Aisner, Francois Wilhelm, Barbara A. Frederick, Marileila Varella-Garcia, Aik-Choon Tan, and Antonio Jimeno


- 2006 | **Novel Treatment for Mantle Cell Lymphoma Including Therapy-Resistant Tumor by NF- κ B and mTOR Dual-Targeting Approach**
Nagendra K. Chaturvedi, Rajkumar N. Rajule, Ashima Shukla, Prakash Radhakrishnan, Gordon L. Todd, Amarnath Natarajan, Julie M. Vose, and Shantaram S. Joshi

2018 | **Sunitinib and SU11652 Inhibit Acid Sphingomyelinase, Destabilize Lysosomes, and Inhibit Multidrug Resistance**
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Line Groth-Pedersen, Viola Oorschot,
Judith Klumperman, Thomas Kirkegaard,
Jesper Nylandsted, and Marja Jäättelä


2088 | **Histone Deacetylase Inhibition Overcomes Drug Resistance through a miRNA-Dependent Mechanism**
Tracy Murray-Stewart, Christin L. Hanigan,
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Robert A. Casero Jr

2100 | **PI3K Stimulates DNA Synthesis and Cell-Cycle Progression via Its p55PIK Regulatory Subunit Interaction with PCNA**
Guihua Wang, Xiaonian Cao, Senyan Lai,
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2031 | **Preclinical Activity of the Type II CD20 Antibody GA101 (Obinutuzumab) Compared with Rituximab and Ofatumumab *In Vitro* and in Xenograft Models**
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Vernon E. Anderson, John J. Pink,
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Zachary Moore, Amy Rommel,
Michael Boatman, Cheryl Lewis,
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2043 | **Targeting Aberrant DNA Double-Strand Break Repair in Triple-Negative Breast Cancer with Alpha-Particle Emitter Radiolabeled Anti-EGFR Antibody**
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2121 | **Sorafenib Overcomes Irinotecan Resistance in Colorectal Cancer by Inhibiting the ABCG2 Drug-Efflux Pump**
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2055 | **The Functionalized Human Serine Protease Granzyme B/VEGF₁₂₁ Targets Tumor Vasculature and Ablates Tumor Growth**
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2135 | **Synthetic Lethal Targeting of PTEN-Deficient Cancer Cells Using Selective Disruption of Polynucleotide Kinase/Phosphatase**
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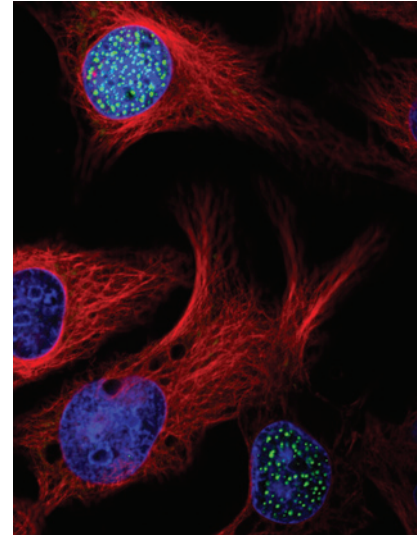
- 2157 **Overexpression of Asparagine Synthetase and Matrix Metalloproteinase 19 Confers Cisplatin Sensitivity in Nasopharyngeal Carcinoma Cells**
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- 2282 **Correction: Inhibition of Monocarboxylate Transporter 2 Induces Senescence-Associated Mitochondrial Dysfunction and Suppresses Progression of Colorectal Malignancies *In Vivo***

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ABOUT THE COVER

This image shows H3K9 trimethylation (H3K9me3) of nuclear histone proteins as a marker for cellular senescence. Immunofluorescence picture of HepG2 human hepatoblastoma cells treated with 20 $\mu\text{mol/L}$ 5-aza-2'-deoxycytidine (5-aza-dC, Dacogen) for a 72-hour time period. Cells were stained using DAPI, α -tubulin, and α -trimethylation of H3K9 (histone protein H3K9me3). The green spots within the cellular nucleus represent the presence of the senescence marker H3K9me3 as a cellular response to the treatment with the DNA-methyltransferase inhibitor 5-aza-2'-deoxycytidine. For more details, see the article by Venturelli and colleagues on page 2226.



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