REVIEW

New Paradigms in Microtubule-Mediated Endocrine Signaling in Prostate Cancer
Sucharita J. Mistry and William K. Oh

CHEMICAL THERAPEUTICS

A Novel Antiandrogen, Compound 30, Suppresses Castration-Resistant and MDV3100-Resistant Prostate Cancer Growth In Vitro and In Vivo
Hidetoshi Kuruma, Hiroaki Matsumoto, Masaki Shiota, Jennifer Bishop, Francois Lamoureux, Christian Thomas, David Briere, Gerrit Los, Martin Gleave, Andrea Fanjul, and Amina Zoubeidi

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Small-Molecule Inhibitors of Acetyltransferase p300 Identified by High-Throughput Screening Are Potent Anticancer Agents
Heng Yang, Christie E. Pinello, Jian Luo, Dawei Li, Yunfei Wang, Lisa Y. Zhao, Stephan C. Jahn, Sanjay Adriane Saldanha, Jamie Planck, Kyla R. Geary, Haiching Ma, Brian K. Law, William R. Roush, Peter Hodder, and Daqing Liao

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Activity of the Fibroblast Growth Factor Receptor Inhibitors Dovitinib (TKI258) and NVP-BGJ398 in Human Endometrial Cancer Cells

Regression of Lung Cancer by Hypoxia-Sensitizing Ruthenium Polypyridyl Complexes
Abhishek Yadav, Thamaran Janaratne, Arthi Krishnan, Sharad S. Singhal, Sushma Yadav, Adam S. Dayoub, Doyle L. Hawkins, Sanjay Awasthi, and Frederick M. MacDonnell

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### LARGE MOLECULE THERAPEUTICS

685 | A Novel Monoclonal Antibody to Secreted Frizzled-Related Protein 2 Inhibits Tumor Growth
Emily Fontenot, Emma Rossi, Russell Mumper, Stephanie Snyder, Sharareh Siamakpour-Reihani, Ping Ma, Eleanor Hilliard, Bradley Bone, David Ketelsen, Charlene Santos, Cam Patterson, and Nancy Klauber-DeMore

### CANCER THERAPEUTICS INSIGHTS

696 | ALK Inhibitor PF02341066 (Crizotinib) Increases Sensitivity to Radiation in Non–Small Cell Lung Cancer Expressing EML4-ALK
Yunguang Sun, Kamila A. Nowak, Nicholas G. Zaorsky, Chia-Lin Winchester, Kunal Dalal, Nicholas J. Giacalone, Ningbo Liu, Maria Werner-Wasik, Mariusz A. Wasik, Adam P. Dicker, and Bo Lu

705 | The Efficacy of CHK1 Inhibitors Is Not Altered by Hypoxia, but Is Enhanced after Reoxygenation
Grete Hasvold, Viola Nåhse-Kumpf, Kinga Tkacz-Stachowska, Einar K. Rofstad, and Randi G. Syljuåsen

717 | Colorectal Cancer Cells Refractory to Anti-VEGF Treatment Are Vulnerable to Glycolytic Blockade due to Persistent Impairment of Mitochondria
Jie Xu, Jilin Wang, Bin Xu, Haiyan Ge, Xiaolin Zhou, and Jing-Yuan Fang

725 | Small-Molecule Inhibitor BMS-777607 Induces Breast Cancer Cell Polyploidy with Increased Resistance to Cytotoxic Chemotherapy Agents
Sharad Sharma, Jun-Ying Zeng, Chun-Mei Zhuang, Yong-Qing Zhou, Hang-Ping Yao, Xing Hu, Ruiwen Zhang, and Ming-Hai Wang

737 | Y-box Binding Protein-1 Contributes to Both HER2/ErbB2 Expression and Lapatinib Sensitivity in Human Gastric Cancer Cells
Tomohiro Shibata, Hitoshi Kan, Yuichi Murakami, Hiroki Ureshino, Kisuuke Watarai, Akihiko Kawahara, Masayoshi Kage, Satoshi Hattori, Mayumi Ono, and Michihiko Kuwano

747 | Bortezomib and SAHA Synergistically Induce ROS-Driven Caspase-Dependent Apoptosis of Nasopharyngeal Carcinoma and Block Replication of Epstein–Barr Virus
Kwai Fung Hut, Benjamin H.W. Lam, Dona N. Ho, Sai Wah Tsao, and Alan K.S. Chiang

### TOOLS & TECHNOLOGIES

759 | Targeting FoxM1 Effectively Retards p53-Null Lymphoma and Sarcoma
Zebin Wang, Yu Zheng, Hyun Jung Park, Jing Li, Janai R. Carr, Yi-ju Chen, Megan M. Kiefer, Dragana Kopanja, Srilata Bagchi, Angela L. Tyner, and Pradip Raychaudhuri

768 | Inhibition of Mutant GNAQ Signaling in Uveal Melanoma Induces AMPK-Dependent Autophagic Cell Death
Grazia Ambrosini, Elgilda Musi, Alan L. Ho, Elisa de Stanchina, and Gary K. Schwartz

777 | Crizotinib Induces PUMA-Dependent Apoptosis in Colon Cancer Cells
Xingnan Zheng, Kan He, Lin Zhang, and Jian Yu

787 | Impact of Tumor Vascularity on Responsiveness to Antiangiogenesis in a Prostate Cancer Stem Cell-Derived Tumor Model
Kexiong Zhang and David J. Waxman

799 | Targeting CXCR2 Enhances Chemotherapeutic Response, Inhibits Mammary Tumor Growth, Angiogenesis, and Lung Metastasis
Bhawna Sharma, Dhananjay M. Nawandar, Kalpan C. Nannuru, Michelle L. Varney, and Rakesh K. Singh

809 | A Phase II Study of Temozolomide in Patients with Advanced Aerodigestive Tract and Colorectal Cancers and Methylation of the O6-Methylguanine-DNA Methyltransferase Promoter
Daniel Hochhauser, Rob Glynn-Jones, Vanessa Potter, Cristina Grávalos, Thomas J. Doyle, Kumudu Pathiraja, Qing Zhang, Ling Zhang, and Edward A. Sausville

819 | [18F]-FLT Positron Emission Tomography Can Be Used to Image the Response of Sensitive Tumors to PI3-Kinase Inhibition with the Novel Agent GDC-0941
Christopher Cawthorne, Natalie Burrows, Roben G. Gieling, Christopher J. Morrow, Duncan Forster, Jamil Gregory, Marc Radiogis, Alison Smigova, Muhammad Babur, Kathryn Simpson, Cassandra Hodkinson, Gavin Brown, Adam McMahon, Caroline Dive, Duncan Hiscock, Ian Wilson, and Kaye J. Williams
ABOUT THE COVER

Mitochondria is the powerhouse of cells (structure, green), supplying the majority of ATP that is essential for cell survival. However, cancer cells present a distinct glycolytic metabolism profile (Warburg effect), which is linked to the malignant transformation process. The emerging anti-VEGF therapy fights cancers by starving the energy supplement, but it was found to enhance the Warburg effect and induce even more aggressive phenotypes. Cancer cells with acquired resistance to anti-VEGF therapy display impaired mitochondria structure and hyperactive glycolytic metabolism, which render them vulnerable to glycolysis blockade therapy. For details, see article by Xu and colleagues on page 717.