Highlights of This Issue 1067

REVIEW

1069 Transcriptional Roles of PARP1 in Cancer
Matthew J. Schiewer and Karen E. Knudsen

MCN Rapid IMPACT

1081 The lncRNA PCAT29 Inhibits Oncogenic Phenotypes in Prostate Cancer
Rohit Malik, Lalit Patel, John R. Prentner, Yang Shi, Matthew K. Iyer, Shruthi Subramaniyan, Alexander Carley, Yashar S. Niknafs, Anirban Sahu, Sumin Han, Teng Ma, Meilan Liu, Irfan A. Asangani, Xiaojun Jing, Xuhong Cao, Saravanan M. Dhanasekaran, Dan R. Robinson, Felix Y. Feng, and Arul M. Chinnaiyan

CELL CYCLE AND SENESCENCE

1088 Cooperativity of E-cadherin and Smad4 Loss to Promote Diffuse-Type Gastric Adenocarcinoma and Metastasis
Jun Won Park, Seok Hoon Jang, Dong Min Park, Na Jung Lim, Chuxia Deng, Dae Yong Kim, Jeffrey E. Green, and Hark Kyun Kim

CELL DEATH AND SURVIVAL

1100 Autocrine VEGF/VEGFR1 Signaling in a Subpopulation of Cells Associates with Aggressive Osteosarcoma
Tetsuro Ohba, Justin M.M. Cates, Heather A. Cole, David A. Slosky, Hirotaka Haro, Takashi Ando, Herbert S. Schwartz, and Jonathan G. Schoenecker

CHROMATIN, GENE, AND RNA REGULATION

1112 Prognostic Potential of DNA Methylation and Transcript Levels of HIF1A and EPAS1 in Colorectal Cancer
Agnieszka Anna Rawłuszko-Wieczorek, Karolina Horbacka, Piotr Krokoś, Matthew Misztal, and Paweł Piotr Jagodziński

DNA DAMAGE AND REPAIR

1128 Base Excision Repair Defects Invoke Hypersensitivity to PARP Inhibition

GENOMICS

1140 Convergent and Divergent Cellular Responses by ErbB4 Isoforms in Mammary Epithelial Cells
Vikram B. Wali, Jonathan W. Haskins, Maureen Gilmore-Hebert, James T. Platt, Zongzhi Liu, and David F. Stern

ONCOGENES AND TUMOR SUPPRESSORS

1156 Conserved Oncogenic Behavior of the FAM83 Family Regulates MAPK Signaling in Human Cancer
Rocky Cipriano, Kristy L.S. Miskimen, Benjamin L. Bryson, Chase R. Foy, Courtney A. Bartel, and Mark W. Jackson

SIGNAL TRANSDUCTION

1166 VDR Activity Is Differentially Affected by Hic-5 in Prostate Cancer and Stromal Cells
Joshua D. Solomon, Marjet D. Heitzer, Teresa T. Liu, Jan H. Beumer, Robert A. Parise, Daniel P. Normolle, Damien A. Leach, Grant Buchanan, and Donald B. DeFranco

1181 VDR Status Arbitrates the Prometastatic Effects of Tumor-Associated Macrophages
Yan Zhang, Quanjun Guo, Zhujun Zhang, Nan Bai, Ze Liu, Min Xiong, Yuquan Wei, Rong Xiang, and Xiaoyue Tan
ABOUT THE COVER

Osteosarcoma is the most common primary bone malignancy in children and young adults and accounts for over 50% of primary skeletal malignancies. Previous reports have demonstrated that expression of VEGF/VEGF-R1 in human osteosarcoma is associated with an aggressive clinical course. Angiographies of K7M3 osteosarcoma-injected murine tibias immunoselected for either VEGF-R1-low expression (Low) or VEGF-R1-high expression (High) compared to contralateral limb (Control) demonstrate that high levels of VEGF-R1 are associated with increased tumor growth and tumor angiogenesis. These results strongly suggest that autocrine VEGF-R1 signaling in a relatively small subpopulation of tumor plays a pivotal role in osteosarcoma progression. These findings may lead to improved stratification of high-risk osteosarcoma and novel strategies for anti-neoplastic therapy based on the inhibition of angiogenesis in this specific tumor type. For more information, see the article by Ohba and colleagues, beginning on page 1100 in this issue.