

Cancer Research

A Journal of the American Association for Cancer Research

Volume 69 • Number 24

December 15, 2009 • Pages 9157–9526

Reviews

Mutant Metabolic Enzymes Are at the Origin of Gliomas. Hai Yan, Darell D. Bigner, Victor Velculescu, and D. Williams Parsons9157

Adult-Type Granulosa Cell Tumors and FOXL2 Mutation. Martin Köbel, C. Blake Gilks, and David G. Huntsman.....9160

Priority Reports

Upregulation of Neutrophil Gelatinase–Associated Lipocalin by ErbB2 through Nuclear Factor- κ B Activation. Shau-Hsuan Li, Valerie S. Hawthorne, Christopher L. Neal, Sartaj Sanghera, Jia Xu, Jun Yang, Hua Guo, Patricia S. Steeg, and Dihua Yu9163

Tgfb β 1 Haploinsufficiency Inhibits the Development of Murine Mutant Kras-Induced Pancreatic Precancer. Kevin Adrian, Matthew J. Strouch, Qinghua Zeng, Morgan R. Barron, Eric C. Cheon, Akilesh Honasoge, Yanfei Xu, Sharbani Phukan, Maureen Sadim, David J. Bentrem, Boris Pasche, and Paul J. Grippo9169

Cell, Tumor, and Stem Cell Biology

Acyl-CoA Synthetase VL3 Knockdown Inhibits Human Glioma Cell Proliferation and Tumorigenicity. Zhengtong Pei, Peng Sun, Ping Huang, Bachchu Lal, John Laterra, and Paul A. Watkins.....9175

WNT16B Is a New Marker of Cellular Senescence That Regulates p53 Activity and the Phosphoinositide 3-Kinase/AKT Pathway. Romuald Binet, Damien Ythier, Ana I. Robles, Manuel Collado, Delphine Larrieu, Claire Fonti, Elisabeth Brambilla, Christian Brambilla, Manuel Serrano, Curtis C. Harris, and Rémy Pedoux.....9183

Epithelial-to-Mesenchymal Transition and Ovarian Tumor Progression Induced by Tissue Transglutaminase. Minghai Shao, Liyun Cao, Changyu Shen, Minati Satpathy, Bhadrani Chelladurai, Robert M. Bigsby, Harikrishna Nakshatri, and Daniela Matei.....9192

Gene Expression Profiles in Peripheral Blood Mononuclear Cells Can Distinguish Patients with Non–Small Cell Lung Cancer from Patients with Nonmalignant Lung Disease. Michael K. Showe, Anil Vachani, Andrew V. Kossenkov, Malik Yousef, Calen Nichols, Elena V. Nikonova, Celia Chang, John Kucharczuk, Bao Tran, Elliot Wakeam, Ting An Yie, David Speicher, William N. Rom, Steven Albelda, and Louise C. Showe.....9202

EZH2 Is Essential for Glioblastoma Cancer Stem Cell Maintenance. Mario-Luca Suvà, Nicolò Riggi, Michalina Janiszewska, Ivan Radovanovic, Paolo Provero, Jean-Christophe Stehle, Karine Baumer, Marie-Aude Le Bitoux, Denis Marino, Luisa Cironi, Victor E. Marquez, Virginie Clément, and Ivan Stamenkovic9211

hnRNP A2 Regulates Alternative mRNA Splicing of TP53INP2 to Control Invasive Cell Migration. Kim Moran-Jones, Joan Grindlay, Marc Jones, Ross Smith, and Jim C. Norman9219

Extracellular Signal–Regulated Kinase Signaling Pathway Regulates Breast Cancer Cell Migration by Maintaining slug Expression. Haoming Chen, Genfeng Zhu, Yong Li, Ravi N. Padia, Zheng Dong, Zhixing K. Pan, Kebin Liu, and Shuang Huang.....9228

Activating Peroxisome Proliferator-Activated Receptor γ Mutant Promotes Tumor Growth *In vivo* by Enhancing Angiogenesis. Lifeng Tian, Jie Zhou, Mathew C. Casimiro, Bing Liang, John O. Ojeifo, Min Wang, Terry Hyslop, Chenguang Wang, and Richard G. Pestell.....9236

Cancer Stem Cells and Aneuploid Populations within Developing Tumors Are the Major Determinants of Tumor Dormancy. Anjali P. Kusumbe and Sharmila A. Bapat9245

Autocrine Bone Morphogenetic Protein-9 Signals through Activin Receptor-like Kinase-2/Smad1/Smad4 to Promote Ovarian Cancer Cell Proliferation. Blanca Herrera, Maarten van Dinther, Peter ten Dijke, and Gareth J. Inman9254

Loss of Δ Np63 α Promotes Invasion of Urothelial Carcinomas via N-Cadherin/Src Homology and Collagen/Extracellular Signal-Regulated Kinase Pathway. Hiroshi Fukushima, Fumitaka Koga, Satoru Kawakami, Yasuhisa Fujii, Soichiro Yoshida, Edward Ratovitski, Barry Trink, and Kazunori Kihara9263

Hypoxia-Regulated Delta-like 1 Homologue Enhances Cancer Cell Stemness and Tumorigenicity. Yuri Kim, Qun Lin, Daniel Zelterman, and Zhong Yun9271

Comparative Analysis of Normal versus CLL B-Lymphocytes Reveals Patient-Specific Variability in Signaling Mechanisms Controlling LFA-1 Activation by Chemokines. Alessio Montresor, Matteo Bolomini-Vittori, Scott I. Simon, Antonella Rigo, Fabrizio Vinante, and Carlo Laudanna9281

Impaired Skin and Mammary Gland Development and Increased γ -Irradiation-Induced Tumorigenesis in Mice Carrying a Mutation of S1152-ATM Phosphorylation Site in Brca1. Sang Soo Kim, Liu Cao, Hye Jung Baek, Sung-Chul Lim, Cuiling Li, Rui-Hong Wang, Xiaoling Xu, Kwan Ho Cho, and Chu-Xia Deng9291

Disruption of Transforming Growth Factor- β Signaling by Five Frequently Methylated Genes Leads to Head and Neck Squamous Cell Carcinoma Pathogenesis. Kristi L. Bennett, Todd Romigh, and Charis Eng9301

Endocrinology

Gonadotropin-Regulated Lymphangiogenesis in Ovarian Cancer Is Mediated by LEDGF-Induced Expression of VEGF-C. Stav Sapoznik, Batya Cohen, Yael Tzuman, Gila Meir, Shifra Ben-Dor, Alon Harmelin, and Michal Neeman9306

Epidemiology

Testing the Circadian Gene Hypothesis in Prostate Cancer: A Population-Based Case-Control Study. Yong Zhu, Richard G. Stevens, Aaron E. Hoffman, Liesel M. FitzGerald, Erika M. Kwon, Elaine A. Ostrander, Scott Davis, Tongzhang Zheng, and Janet L. Stanford9315

Circulating Carotenoids, Mammographic Density, and Subsequent Risk of Breast Cancer. Rulla M. Tamimi, Graham A. Colditz, and Susan E. Hankinson9323

Contents (Continued)

Experimental Therapeutics, Molecular Targets, and Chemical Biology

Strongly Enhanced Antitumor Activity of Trastuzumab and Pertuzumab Combination Treatment on HER2-Positive Human Xenograft Tumor Models. Werner Scheuer, Thomas Friess, Helmut Burtscher, Birgit Bossenmaier, Josef Endl, and Max Hasmann9330

Imatinib Mesylate Induces Cisplatin Hypersensitivity in Bcr-Abl⁺ Cells by Differential Modulation of p53 Transcriptional and Proapoptotic Activity. Ioanna Skorta, Moshe Oren, Christiane Markwardt, Matthias Gutekunst, Walter E. Aulitzky, and Heiko van der Kuip9337

Disruption of Sphingosine 1-Phosphate Lyase Confers Resistance to Chemotherapy and Promotes Oncogenesis through Bcl-2/Bcl-xL Upregulation. Sandra Colié, Paul P. Van Veldhoven, Blandine Kedjouar, Carmen Bedia, Virginie Albinet, Sonia-Caroline Sorli, Virginie Garcia, Mojgan Djavaheri-Mergny, Chantal Bauvy, Patrice Codogno, Thierry Levade, and Nathalie Andrieu-Abadie9346

MBP-1 Inhibits Breast Cancer Growth and Metastasis in Immunocompetent Mice. Tatsuo Kanda, Amit Raychoudhuri, Robert Steele, John E. Sagartz, Cheri West, and Ratna B. Ray9354

High DNA Methyltransferase 3B Expression Mediates 5-Aza-Deoxycytidine Hypersensitivity in Testicular Germ Cell Tumors. Maroun J. Beyrouthy, Kristen M. Garner, Mary P. Hever, Sarah J. Freemantle, Alan Eastman, Ethan Dmitrovsky, and Michael J. Spinella9360

Targeting the Fanconi Anemia/BRCA Pathway Circumvents Drug Resistance in Multiple Myeloma. Danielle N. Yarde, Vasco Oliveira, Linda Mathews, Xingyu Wang, Alejandro Villagra, David Boulware, Kenneth H. Shain, Lori A. Hazlehurst, Melissa Alsina, Dung-Tsa Chen, Amer A. Beg, and William S. Dalton9367

Immunology

In vivo Administration of Artificial Antigen-Presenting Cells Activates Low-Avidity T Cells for Treatment of Cancer. Stefano Ugel, Alessia Zoso, Carmela De Santo, Yu Li, Ilaria Marigo, Paola Zanovello, Elisa Scarselli, Barbara Cipriani, Mathias Oelke, Jonathan P. Schneck, and Vincenzo Bronte9376

Reprogramming T Lymphocytes for Melanoma Adoptive Immunotherapy by T-Cell Receptor Gene Transfer with Lentiviral Vectors. Sara Bobisse, Maria Rondina, Anna Merlo, Veronica Tisato, Susanna Mandruzzato, Mario Amendola, Luigi Naldini, Ralph A. Willemsen, Reno Debets, Paola Zanovello, and Antonio Rosato9385

Folate Receptor β Is Expressed by Tumor-Associated Macrophages and Constitutes a Marker for M2 Anti-inflammatory/Regulatory Macrophages. Amaya Puig-Kröger, Elena Sierra-Filardi, Angeles Domínguez-Soto, Rafael Samaniego, María Teresa Corcuera, Fernando Gómez-Aguado, Manohar Ratnam, Paloma Sánchez-Mateos, and Angel L. Corbí9395

Molecular Biology, Pathobiology, and Genetics

Heat Shock Factor 1-Mediated Aneuploidy Requires a Defective Function of p53. Eun-Ho Kim, Yoon-Jin Lee, Sangwoo Bae, Jae Seon Lee, Joon Kim, and Yun-Sil Lee9404

Deficiency of pRb Family Proteins and p53 in Invasive Urothelial Tumorigenesis. Feng He, Lan Mo, Xiao-Yong Zheng, Changkun Hu, Herbert Lepor, Eva Y-H.P. Lee, Tung-Tien Sun, and Xue-Ru Wu9413

Global Changes in Processing of mRNA 3' Untranslated Regions Characterize Clinically Distinct Cancer Subtypes. Priyam Singh, Travis L. Alley, Sarah M. Wright, Sonya Kamdar, William Schott, Robert Y Wilpan, Kevin D. Mills, and Joel H. Graber9422

Embryonic Lethality after Combined Inactivation of *Fancd2* and *Mlh1* in Mice. Henri J. van de Vrugt, Laura Eaton, Amy Hanlon Newell, Mushen Al-Dhalimy, R. Michael Liskay, Susan B. Olson, and Markus Grompe9431

Srcasm Inhibits Fyn-Induced Cutaneous Carcinogenesis with Modulation of Notch1 and p53. Liang Zhao, Weijie Li, Christine Marshall, Thomas Griffin, Matthew Hanson, Ryan Hick, Tzvet Dentchev, Erik Williams, Adrienne Werth, Christopher Miller, Hasan Bashir, Warren Pear, and John T. Seykora9439

Reduced Tumor Necrosis Factor Receptor-Associated Death Domain Expression Is Associated with Prostate Cancer Progression. Diping Wang, R. Bruce Montgomery, Lucy J. Schmidt, Elahe A. Mostaghel, Haojie Huang, Peter S. Nelson, and Donald J. Tindall9448

Prevention

Natural Sphingadienes Inhibit Akt-Dependent Signaling and Prevent Intestinal Tumorigenesis. Henrik Fyrst, Babak Oskouian, Padmavathi Bandhuvula, Yaqiong Gong, Hoe Sup Byun, Robert Bittman, Andrew R. Lee, and Julie D. Saba9457

Inositol Hexaphosphate Suppresses Growth and Induces Apoptosis in Prostate Carcinoma Cells in Culture and Nude Mouse Xenograft: PI3K-Akt Pathway as Potential Target. Mallikarjuna Gu, Srirupa Roy, Komal Raina, Chapla Agarwal, and Rajesh Agarwal9465

Prevention of Mammary Carcinogenesis in MMTV-*neu* Mice by Cruciferous Vegetable Constituent Benzyl Isothiocyanate. Renaud Warin, William H. Chambers, Douglas M. Potter, and Shivendra V. Singh9473

Systems Biology and Emerging Technologies

Differential Destruction of Stem Cells: Implications for Targeted Cancer Stem Cell Therapy. Mary E. Sehl, Janet S. Sinsheimer, Hua Zhou, and Kenneth L. Lange9481

Gene Networks and microRNAs Implicated in Aggressive Prostate Cancer. Liang Wang, Hui Tang, Venugopal Thayanithy, Subbaya Subramanian, Ann L. Oberg, Julie M. Cunningham, James R. Cerhan, Clifford J. Steer, and Stephen N. Thibodeau9490

Tumor Microenvironment

Invasion of Human Breast Cancer Cells *In vivo* Requires Both Paracrine and Autocrine Loops Involving the Colony-Stimulating Factor-1 Receptor. Antonia Patsialou, Jeffrey Wyckoff, Yarong Wang, Sumanta Goswami, E. Richard Stanley, and John S. Condeelis9498

Letter to the Editor

Confounding Effects in "A Six-Gene Signature Predicting Breast Cancer Lung Metastasis": Reply. Keltouma Driouch, Florian Bonin, Soraya Sin, Géraldine Clairac, and Rosette Lidereau9507

Acknowledgment to Reviewers

Acknowledgment to Reviewers9512

Cancer Research

The Journal of Cancer Research (1916–1930) | The American Journal of Cancer (1931–1940)

69 (24)

Cancer Res 2009;69:9157-9525.

Updated version	Access the most recent version of this article at: http://cancerres.aacrjournals.org/content/69/24
Supplementary Material	Access the most recent supplemental material at: http://cancerres.aacrjournals.org/content/suppl/2009/12/14/69.24.DC1

E-mail alerts [Sign up to receive free email-alerts](#) related to this article or journal.

Reprints and Subscriptions To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions To request permission to re-use all or part of this article, use this link <http://cancerres.aacrjournals.org/content/69/24>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.