

Cancer Research

A Journal of the American Association for Cancer Research

Volume 68 • Number 21

November 1, 2008 • Pages 8643–9106

AACR Centennial Series

A History of Cancer Chemotherapy. Vincent T. DeVita, Jr. and Edward Chu.....8643

Reviews

Just Say No to ATOH: How *HICI* Methylation Might Predispose Medulloblastoma to Lineage Addiction. Kimberly J. Briggs, Charles G. Eberhart, and D. Neil Watkins8654

Conspirators in a Capital Crime: Co-Deletion of p18^{INK4c} and p16^{INK4a}/p14^{ARF}/p15^{INK4b} in Glioblastoma Multiforme. David A. Solomon, Jung-Sik Kim, Walter Jean, and Todd Waldman8657

Priority Reports

Targeting YB-1 in HER-2 Overexpressing Breast Cancer Cells Induces Apoptosis via the mTOR/STAT3 Pathway and Suppresses Tumor Growth in Mice. Cathy Lee, Jaspreet Dhillon, Michelle Y.C. Wang, Yuanyuan Gao, Kaiji Hu, Eugene Park, Arezoo Astanehe, Mien-Chie Hung, Peter Eirew, Connie J. Eaves, and Sandra E. Dunn8661

Neuropilin-1 Upholds Dedifferentiation and Propagation Phenotypes of Renal Cell Carcinoma Cells by Activating Akt and Sonic Hedgehog Axes. Ying Cao, Ling Wang, Debashis Nandy, Ying Zhang, Ananda Basu, Derek Radisky, and Debabrata Mukhopadhyay.....8667

Tandem Duplication Producing a Novel Oncogenic *BRAF* Fusion Gene Defines the Majority of Pilocytic Astrocytomas. David T.W. Jones, Sylvia Kocialkowski, Lu Liu, Danita M. Pearson, L. Magnus Bäcklund, Koichi Ichimura, and V. Peter Collins.....8673

Cell, Tumor, and Stem Cell Biology

Bryostatin-5 Blocks Stromal Cell-Derived Factor-1 Induced Chemotaxis via Desensitization and Down-regulation of Cell Surface CXCR4 Receptors. Xing He, Liyan Fang, Jue Wang, Yanghua Yi, Shuyu Zhang, and Xin Xie8678

Endogenous Interleukin-4 Promotes Tumor Development by Increasing Tumor Cell Resistance to Apoptosis. Zhiguang Li, Jing Jiang, Zibing Wang, Jinhua Zhang, Mingjie Xiao, Chunhui Wang, Yu Lu, and Zhihai Qin8687

Different Roles of Estrogen Receptors α and β in the Regulation of E-Cadherin Protein Levels in a Mouse Mammary Epithelial Cell Line. Luisa A. Helguero, Karolina Lindberg, Cissi Gardmo, Thomas Schwend, Jan-Åke Gustafsson, and Lars-Arne Haldosén8695

p37^{Ing1b} Regulates B-Cell Proliferation and Cooperates with p53 to Suppress Diffuse Large B-Cell Lymphomagenesis. Andrew H. Coles, Concetta G.A. Marfella, Anthony N. Imbalzano, Heather A. Steinman, David S. Garlick, Rachel M. Gerstein, and Stephen N. Jones8705

Delocalization of the Microtubule Motor Dynein from Mitotic Spindles by the Human Papillomavirus E7 Oncoprotein Is Not Sufficient for Induction of Multipolar Mitoses. Christine L. Nguyen, Margaret E. McLaughlin-Drubin, and Karl Münger8715

Tnk1/Kos1 Knockout Mice Develop Spontaneous Tumors. Sarasija Hoare, Kishalay Hoare, Mary K. Reinhard, Young J. Lee, S. Paul Oh, and W. Stratford May, Jr.....8723

FoxM1B Transcriptionally Regulates Vascular Endothelial Growth Factor Expression and Promotes the Angiogenesis and Growth of Glioma Cells. Yujian Zhang, Nu Zhang, Bingbing Dai, Mingguang Liu, Raymond Sawaya, Keping Xie, and Suyun Huang8733

Deleted in Liver Cancer 1 Controls Cell Migration through a Dia1-Dependent Signaling Pathway. Gerlinde Holeiter, Johanna Heering, Patrik Erlmann, Simone Schmid, Ruth Jähne, and Monilola A. Olayioye.....8743

Reduced Eukaryotic Initiation Factor 2B_e-Subunit Expression Suppresses the Transformed Phenotype of Cells Overexpressing the Protein. James W. Gallagher, Neil Kubica, Scot R. Kimball, and Leonard S. Jefferson8752

c-Cbl Interacts with CD38 and Promotes Retinoic Acid-Induced Differentiation and G₀ Arrest of Human Myeloblastic Leukemia Cells. Miaoqing Shen and Andrew Yen8761

Loss of NKX3.1 Favors Vascular Endothelial Growth Factor-C Expression in Prostate Cancer. Heyu Zhang, Michael H. Muders, Jinping Li, Francesca Rinaldo, Donald J. Tindall, and Kaustubh Datta8770

A Key Tyrosine (Y1494) in the β 4 Integrin Regulates Multiple Signaling Pathways Important for Tumor Development and Progression. Udayan Dutta and Leslie M. Shaw.....8779

Insulin-like Growth Factor 2 Is Required for Progression to Advanced Medulloblastoma in *patched1* Heterozygous Mice. Ryan B. Corcoran, Tal Bachar Raveh, Monique T. Barakat, Eunice Y. Lee, and Matthew P. Scott8788

A Novel Association between p130^{Cas} and Resistance to the Chemotherapeutic Drug Adriamycin in Human Breast Cancer Cells. Huy Q. Ta, Keena S. Thomas, Randy S. Schrecengost, and Amy H. Bouton8796

Endocrinology

Estrogen-Related Receptor α Is Critical for the Growth of Estrogen Receptor-Negative Breast Cancer. Rebecca A. Stein, Ching-yi Chang, Dmitri A. Kazmin, James Way, Thies Schroeder, Melanie Wergin, Mark W. Dewhirst, and Donald P. McDonnell.....8805

Epidemiology

Prevalence, Acquisition, and Clearance of Cervical Human Papillomavirus Infection among Women with Normal Cytology: Hawaii Human Papillomavirus Cohort Study. Marc T. Goodman, Yurii B. Shvetsov, Katharine McDuffie, Lynne R. Wilkens, Xuemei Zhu, Pamela J. Thompson, Lily Ning, Jeffrey Killeen, Lori Kamemoto, and Brenda Y. Hernandez8813

Contents (Continued)

Routine Diagnostic X-ray Examinations and Increased Frequency of Chromosome Translocations among U.S. Radiologic Technologists. Alice J. Sigurdson, Parveen Bhatti, Dale L. Preston, Michele Morin Doody, Diane Kampa, Bruce H. Alexander, Dayton Petibone, Lee C. Yong, Alan A. Edwards, Elaine Ron, and James D. Tucker8825

Gestational Hypertension, Preeclampsia, and Risk of Testicular Cancer. Andreas Pettersson, Lorenzo Richiardi, Sven Cnattingius, Magnus Kaijser, and Olof Akre8832

Association Study of Prostate Cancer Susceptibility Variants with Risks of Invasive Ovarian, Breast, and Colorectal Cancer. Honglin Song, Thibaud Koessler, Shahana Ahmed, Susan J. Ramus, Susanne Krüger Kjaer, Richard A. DiCioccio, Eva Wozniak, Estrid Hogdall, Alice S. Whittemore, Valerie McGuire, Bruce A.J. Ponder, Clare Turnbull, Sarah Hines, Nazneen Rahman, The Breast Cancer Susceptibility Collaboration (UK), Rosalind A. Eeles, Douglas F. Easton, Simon A. Gayther, Alison M. Dunning, and Paul D.P. Pharoah.....8837

Experimental Therapeutics, Molecular Targets, and Chemical Biology

Tumor Regression in Mice by Delivery of Bcl-2 Small Interfering RNA with Pegylated Cationic Liposomes. Satoru Sonoke, Toshihiro Ueda, Kae Fujiwara, Yohei Sato, Kazuchika Takagaki, Kazuko Hirabayashi, Tadaaki Ohgi, and Junichi Yano.....8843

Identification of *Pbx1*, a Potential Oncogene, as a Notch3 Target Gene in Ovarian Cancer. Joon T. Park, Ie-Ming Shih, and Tian-Li Wang8852

Modification of Cysteine Residue in p65 Subunit of Nuclear Factor- κ B (NF- κ B) by Picroliv Suppresses NF- κ B-Regulated Gene Products and Potentiates Apoptosis. Preetha Anand, Ajaikumar B. Kunnumakkara, Kuzhuvilil B. Harikumar, Kwang Seok Ahn, Vladimir Badmaev, and Bharat B. Aggarwal8861

Modulation of Orphan Nuclear Receptor Nur77-Mediated Apoptotic Pathway by Acetylshikonin and Analogues. Jie Liu, Wen Zhou, Shao-Shun Li, Zhe Sun, Bingzhen Lin, Yuan-Yuan Lang, Jia-You He, Xihua Cao, Tingdong Yan, Li Wang, Jiongming Lu, Young-Hoon Han, Yu Cao, Xiao-kun Zhang, and Jin-Zhang Zeng8871

The Taccalonolides: Microtubule Stabilizers That Circumvent Clinically Relevant Taxane Resistance Mechanisms. April L. Risinger, Evelyn M. Jackson, Lisa A. Polin, Gregory L. Helms, Desiree A. LeBoeuf, Patrick A. Joe, Elizabeth Hopper-Borge, Richard F. Ludueña, Gary D. Kruh, and Susan L. Mooberry.....8881

Milk Fat Globule EGF-8 Promotes Melanoma Progression through Coordinated Akt and Twist Signaling in the Tumor Microenvironment. Masahisa Jinushi, Yukoh Nakazaki, Daniel R. Carrasco, Dobrin Draganov, Nicholas Souders, Matthew Johnson, Martin C. Mihm, and Glenn Dranoff.....8889

The Anaplastic Lymphoma Kinase Controls Cell Shape and Growth of Anaplastic Large Cell Lymphoma through Cdc42 Activation. Chiara Ambrogio, Claudia Voena, Andrea D. Manazza, Cinzia Martinengo, Carlotta Costa, Tomas Kirchhausen, Emilio Hirsch, Giorgio Inghirami, and Roberto Chiarle.....8899

ERR γ Mediates Tamoxifen Resistance in Novel Models of Invasive Lobular Breast Cancer. Rebecca B. Riggins, Jennifer P.-J. Lan, Uwe Klimach, Alan Zwart, Luciane R. Cavalli, Bassem R. Haddad, Li Chen, Ting Gong, Jianhua Xuan, Stephen P. Ethier, and Robert Clarke.....8908

Baicalein Overcomes Tumor Necrosis Factor-Related Apoptosis-Inducing Ligand Resistance via Two Different Cell-Specific Pathways in Cancer Cells but not in Normal Cells. Hiroya Taniguchi, Tatsushi Yoshida, Mano Horinaka, Takashi Yasuda, Ahmed E. Goda, Masako Konishi, Miki Wakada, Keisho Kataoka, Toshikazu Yoshikawa, and Toshiyuki Sakai8918

Bioselection of a Gain of Function Mutation that Enhances Adenovirus 5 Release and Improves Its Antitumoral Potency. Alena Gros, Jordi Martínez-Quintanilla, Cristina Puig, Sonia Guedan, David G. Molleví, Ramon Alemany, and Manel Cascallo8928

Zerumbone Down-regulates Chemokine Receptor CXCR4 Expression Leading to Inhibition of CXCL12-Induced Invasion of Breast and Pancreatic Tumor Cells. Bokyung Sung, Sonia Jhurani, Kwang Seok Ahn, Yoichi Mastuo, Tingfang Yi, Sushovan Guha, Mingyao Liu, and Bharat B. Aggarwal8938

Lowering Bone Mineral Affinity of Bisphosphonates as a Therapeutic Strategy to Optimize Skeletal Tumor Growth Inhibition *In vivo*. Pierrick G.J. Fournier, Florence Daubiné, Mark W. Lundy, Michael J. Rogers, Frank H. Ebetino, and Philippe Clézardin.....8945

Molecular Biology, Pathobiology, and Genetics

DNA Hypomethylation Arises Later in Prostate Cancer Progression than CpG Island Hypermethylation and Contributes to Metastatic Tumor Heterogeneity. Srinivasan Yegnasubramanian, Michael C. Haffner, Yonggang Zhang, Bora Gurel, Toby C. Cornish, Zhijin Wu, Rafael A. Irizarry, James Morgan, Jessica Hicks, Theodore L. DeWeese, William B. Isaacs, G. Steven Bova, Angelo M. De Marzo, and William G. Nelson8954

EWS-FLI1 Induces Developmental Abnormalities and Accelerates Sarcoma Formation in a Transgenic Mouse Model. Patrick P. Lin, Manoj K. Pandey, Fenghua Jin, Shunbin Xiong, Michael Deavers, John M. Parant, and Guillermina Lozano8968

Roles for MicroRNAs, miR-93 and miR-130b, and Tumor Protein 53-Induced Nuclear Protein 1 Tumor Suppressor in Cell Growth Dysregulation by Human T-Cell Lymphotropic Virus 1. Man Lung Yeung, Jun-ichirou Yasunaga, Yamina Bennasser, Nelson Dusetti, David Harris, Nafees Ahmad, Masao Matsuoka, and Kuan-Teh Jeang8976

Enhanced Sensitivity of the *RET* Proto-Oncogene to Ionizing Radiation *In vitro*. Claudia Béu Volpato, Minerva Martínez-Alfaro, Raffaella Corvi, Coralie Gabus, Sylvie Sauvaigo, Pietro Ferrari, Elena Bonora, Alessandro De Grandi, and Giovanni Romeo.....8986

Common Familial Colorectal Cancer Linked to Chromosome 7q31: A Genome-Wide Analysis. Deborah W. Neklason, Richard A. Kerber, David B. Nilson, Hoda Anton-Culver, Ann G. Schwartz, Constance A. Griffin, Jan T. Lowery, Joellen M. Schildkraut, James P. Evans, Gail E. Tomlinson, Louise C. Strong, Alexander R. Miller, Jill E. Stopfer, Dianne M. Finkelstein, Prakash M. Nadkarni, Carol H. Kasten, Geraldine P. Mineau, and Randall W. Burt8993

Aurora Kinase A Inhibition Leads to p73-Dependent Apoptosis in p53-Deficient Cancer Cells. Altaf A. Dar, Abbes Belkhir, Jeffrey Ecsedy, Alexander Zaika, and Wael El-Rifai.....8998

Carcinogen-Induced Gene Promoter Hypermethylation Is Mediated by DNMT1 and Causal for Transformation of Immortalized Bronchial Epithelial Cells. Leah A. Damiani, Christin M. Yingling, Shuguang Leng, Paul E. Romo, Jun Nakamura, and Steven A. Belinsky.....9005

Imatinib Mesylate Induces Quiescence in Gastrointestinal Stromal Tumor Cells through the CDH1-SKP2-p27^{Kip1} Signaling Axis. Ying Liu, Sophie A. Perdreau, Payel Chatterjee, Linan Wang, Shih-Fan Kuan, and Anette Duensing9015

Prevention

Plumbagin, a Medicinal Plant-Derived Naphthoquinone, Is a Novel Inhibitor of the Growth and Invasion of Hormone-Refractory Prostate Cancer. Moammir H. Aziz, Nancy E. Dreckschmidt, and Ajit K. Verma.....9024

Contents (Continued)

Systems Biology and Emerging Technologies

Efficacy of Weekly Docetaxel and Bevacizumab in Mesenchymal Chondrosarcoma: A New Theranostic Method Combining Xenografted Biopsies with a Mathematical Model. Boris Gorelik, Irit Ziv, Revital Shohat, Michael Wick, W. David Hankins, David Sidransky, and Zvia Agur.....9033

CCCTC-Binding Factor Confines the Distal Action of Estrogen Receptor. Chang S. Chan and Jun S. Song.....9041

Tumor Microenvironment

Macrophage-Derived SPARC Bridges Tumor Cell-Extracellular Matrix Interactions toward Metastasis. Sabina Sangaletti, Emma Di Carlo, Silvia Gariboldi, Silvia Miotti, Barbara Cappetti, Mariella Parenza, Cristiano Rumio, Rolf A. Brekken, Claudia Chiodoni, and Mario P. Colombo.....9050

The Chemokine Receptor CX3CR1 Is Involved in the Neural Tropism and Malignant Behavior of Pancreatic Ductal Adenocarcinoma. Federica Marchesi, Lorenzo Piemonti, Giuseppe Fedele, Annarita Destro, Massimo Roncalli, Luca Albarello, Claudio Doglioni, Achille Anselmo, Andrea Doni, Paolo Bianchi, Luigi Laghi, Alberto Malesci, Luigi Cervo, MariaLuisa Malosio, Michele Reni, Alessandro Zerbi, Valerio Di Carlo, Alberto Mantovani, and Paola Allavena.....9060

Moderate Expression of Prostate-Specific Membrane Antigen, a Tissue Differentiation Antigen and Folate Hydrolase, Facilitates Prostate Carcinogenesis. Veronica Yao, Anil Parwani, Christoph Maier, Warren DeWayne Heston, and Dean John Bacich.....9070

Targeting Melanoma Growth and Metastasis with Systemic Delivery of Liposome-Incorporated Protease-Activated Receptor-1 Small Interfering RNA. Gabriel J. Villares, Maya Zigler, Hua Wang, Vladislava O. Melnikova, Hong Wu, Ran Friedman, Michael C. Leslie, Pablo E. Vivas-Mejia, Gabriel Lopez-Berestein, Anil K. Sood, and Menashe Bar-Eli.....9078

Fibroblasts Isolated from Common Sites of Breast Cancer Metastasis Enhance Cancer Cell Growth Rates and Invasiveness in an Interleukin-6-Dependent Manner. Adam W. Studebaker, Gianluca Storci, Jillian L. Werbeck, Pasquale Sansone, A. Kate Sasser, Simona Tavolari, Tim Huang, Michael W.Y. Chan, Frank C. Marini, Thomas J. Rosol, Massimiliano Bonafé, and Brett M. Hall9087

Activation of Matrix Metalloproteinase-2 (MMP-2) by Membrane Type 1 Matrix Metalloproteinase through an Artificial Receptor for ProMMP-2 Generates Active MMP-2. Yuki Nishida, Hisashi Miyamori, Erik W. Thompson, Takahisa Takino, Yoshio Endo, and Hiroshi Sato9096

Corrections

Correction: Granulocyte Maturation after Butyrate Treatment of Leukemic Blasts9105

Correction: ABCC3 Amplification and Taxane Resistance9105

Cancer Research

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

68 (21)

Cancer Res 2008;68:8643-9105.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/68/21>

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/68/21>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.