Cancer Research
VOLUME 54 • NUMBER 10 • CNREA 8 • PP. 2527–2822

CONTENTS

Advances in Brief

2527 **Both the Cytosols and Detergent Extracts of Breast Cancer Tissues Are Suited to Evaluate the Prognostic Impact of the Urokinase-Type Plasminogen Activator and Its Inhibitor, Plasminogen Activator Inhibitor Type 1.** Fritz Jänicke, Lothar Pache, Manfred Schmitt, Kurt Ulm, Christoph Thomssen, Anita Prechtl, and Henner Graeff.

2531 **Interleukin-2-secreting Mouse Fibroblasts Transfected with Genomic DNA from Murine Melanoma Cells Prolong the Survival of Mice with Melanoma.** Tae Sung Kim and Edward P. Cohen.

2536 **Phosphoinositide Signaling in Nuclei of Friend Cells: Phospholipase C β Down-Regulation Is Related to Cell Differentiation.** Alberto M. Martelli, Anna M. Billi, R. Stewart Gilmour, Luca M. Neri, Lucia Manzoli, Andrea Ognibene, and Lucio Cocco.

2541 **Elongation Factor 1δ Is Enhanced following Exposure to Ionizing Radiation.** Mira Jung, Alexei D. Kondratyev, and Anatoly Dritschilo.

2544 **Radiosensitivity of Ataxia-Telangiectasia, X-Linked Agammaglobulinemia, and Related Syndromes Using a Modified Colony Survival Assay.** Yong K. Huo, Zhijun Wang, Ji-Hong Hong, Luciana Chessa, William H. McBride, Susan L. Perlman, and Richard A. Gatti.

2548 **Evidence for Involvement of BRCA1 in Sporadic Breast Carcinomas.** Craig S. Cropp, Heli A. Nevanlinna, Seppo Pyrhönen, Ulf-Håkan Stenman, Paul Salmikangas, Hans Albertsen, Ray White, and Robert Callahan.

2552 **Methylation of the Estrogen Receptor Gene CpG Island Marks Loss of Estrogen Receptor Expression in Human Breast Cancer Cells.** Yvonne L. Ottaviano, Jean-Pierre Issa, Fritz F. Parl, Helene S. Smith, Stephen B. Baylin, and Nancy E. Davidson.

2556 **Cross-Resistance to Cisplatin in Cells Resistant to Photofrin-mediated Photodynamic Therapy.** Roger A. Moorehead, Steven G. Armstrong, Brian C. Wilson, and Gurmit Singh.

2560 **Developmental Regulation of Genomic Imprinting of the *IGF2* Gene in Human Liver.** Stella M. Davies.

2563 **Cellular Interactions of CRKL, an SH2-SH3 Adaptor Protein.** Johanna ten Hoeve, Vesa Kaartinen, Thoas Fioretos, Leena Haataja, Jan-Willem Voncken, Nora Heisterkamp, and John Groffen.

2568 **Suppression of Tumorigenicity in Human Teratocarcinoma Cell Line PA-1 by Introduction of Chromosome 4.** I. Jean McGowan-Jordan, Marsha D. Speevak, David Blakey, and Mario Chevrette.

2573 **Positron Emission Tomography Analysis of Metastatic Tumor Cell Trafficking.** Naoto Oku, Chieko Koike, Masaaki Sugawara, Hideo Tsukada, Tatsuro Irimura, and Shoji Okada.

2577 **Androgen-independent Cancer Progression and Bone Metastasis in the LNCaP Model of Human Prostate Cancer.** George N. Thalmann, Ploutarchos E. Anezinis, Shi-Ming Chang, Haiyen E. Zhau, E. Edmund Kim, Vicki L. Hopwood, Sen Pathak, Andrew C. von Eschenbach, and Leland W. K. Chung.

Regular Articles

Biochemistry and Biophysics

2582 **Basic Fibroblast Growth Factor Protects Endothelial Cells against Radiation-induced Programmed Cell Death *in Vitro* and *in Vivo*.** Zvi Fuks, Roger S. Persaud, Alan Alfieri, Maureen McLoughlin, Desiree Ehleiter, Jeffery L. Schwartz, Andrew P. Seddon, Carlos Cordon-Cardo, and Adriana Haimovitz-Friedman.

2591 **Protein Kinase C Mediates Basic Fibroblast Growth Factor Protection of Endothelial Cells against Radiation-induced Apoptosis.** Adriana Haimovitz-Friedman, Naomi Balaban, Maureen McLoughlin, Desiree Ehleiter, Joseph Michaeli, Israel Vlodavsky, and Zvi Fuks.

2598 **Characterization of Tumor-associated Neural Cell Adhesion Molecule in Human Serum.** Kiyoshi Takamatsu, Bernhard Auerbach, Rita Gerardy-Schahn, Matthias Eckhardt, Gabriele Jaques, and Norbert Madry.

2604 **Homologous and Heterologous Regulation of α-Melanocyte-stimulating Hormone Receptors in Human and Mouse Melanoma Cell Lines.** Walter Siegrist, Sibylla Stutz, and Alex N. Eberle.

2611 **1-Phosphatidylinositol 4-Kinase: An Enzyme Linked with Proliferation and Malignancy.** Maria Teresa Rizzo and George Weber.

Carcinogenesis

2615 **Differential Expression of Human *Wnt* Genes 2, 3, 4, and 7B in Human Breast Cell Lines and Normal and Disease States of Human Breast Tissue.** Emmanuel L. Huguet, Jill A. McMahon, Andrew P. McMahon, Roy Bicknell, and Adrian L. Harris.

2622 **Inhibition of Cell Proliferation by Ciprofibrate in Glutathione *S*-Transferase P1-1-positive Rat Hepatic Hyperplastic Nodules.** Zhi-Ying Chen, Ying-Fei Liu, Cheng-Yi He, Collin C. White, and David L. Eaton.

2630 **Persistence of Carcinogen-altered Cell Population in Rat Urothelium Which Can Be Promoted to Tumors by Chronic Inflammatory Stimulus.** Koji Kawai, Hitoshi Kawamata, Shuji Kemeyama, Alfred Rademaker, and Ryoichi Oyasu.

2633 **Allelic Loss at the Predisposing Gene Locus in Spontaneous and Chemically Induced Renal Cell Carcinomas in the Eker Rat.** Yoshiaki Kubo, Hiroaki Mitani, and Okio Hino.

Clinical Investigations

2636 **Phase I Clinical Trial of Irinotecan (CPT-11), 7-Ethyl-10-[4-(1-piperidino)-1-piperidino]carbonyloxy-camptothecin, and Cisplatin in Combination with Fixed Dose of Vindesine in Advanced Non-Small Cell Lung Cancer.** Tetsu Shinkai, Hitoshi Arioka, Hiroshi Kunikane, Kenji Eguchi, Yasutsuna Sasaki, Tomohide Tamura, Yuichiro Ohe, Fumihiro Oshita, Makoto Nishio, Atsuya Karato, Hiroaki Okamoto, Hajime Nakashima, Hironobu Ohmatsu, Junichi Shiraishi, Naohiro Nomura, and Nagahiro Saijo.

Experimental Therapeutics

2643 **Antibody-Indocyanin Conjugates for Immunophotodetection of Human Squamous Cell Carcinoma in Nude Mice.** Silvio Folli, Patrick Westermann, Daniel Braichotte, André Pèlegrin, Georges Wagnières, Hubert van den Bergh, and Jean-Pierre Mach.

2650 **Effects of Sonicated Eosinophils on the *in Vitro* Sensitivity of Human Lymphoma Cells to Glucose Oxidase.** Michael K. Samoszuk, Vincent Nguyen, Cherry T. Thomas, and Dawn M. Jacobson.

2654 **Suramin, an Anticancer and Angiosuppressive Agent, Inhibits Endothelial Cell Binding of Basic Fibroblast Growth Factor, Migration, Proliferation, and Induction of Urokinase-Type Plasminogen Activator.** Shingo Takano, Stephen Gately, Mary E. Neville, William F. Herblin, Janet L. Gross, Herbert Engelhard, Michael Perricone, Kristi Eidsvoog, and Steven Brem.

2661 **Selective *in Vivo* Accumulation of *N*-Acetyl-4-*S*-cysteaminylphenol in B16F10 Murine Melanoma and Enhancement of Its *in Vitro* and *in Vivo* Antimelanoma Effect by Combination of Buthionine Sulfoximine.** Frank Alena, Takashi Iwashina, Adrian Gili, and Kowichi Jimbow.

2667 **Interleukin-1 Receptor Blockade Reduces the Number and Size of Murine B16 Melanoma Hepatic Metastases.** Fernando Vidal-Vanaclocha, Cristian Amézaga, Aintzane Asumendi, Gilles Kaplanski, and Charles A. Dinarello.

2673 **Novel 6,5-fused Ring Heterocyclic Antifolates: Biochemical and Biological Characterization.** John J. McGuire, Vladimir V. Bergoltz, Kathryn J. Heitzman, William H. Haile, Cynthia A. Russell, Wanda E. Bolanowska, Yoshihiko Kotake, Toru Haneda, and Hiroaki Nomura.

2680 **Cellular Pharmacology of Dichloro(ethylenediamine)platinum(II) in Cisplatin-sensitive and Resistant Human Ovarian Carcinoma Cells.** Antti P. Jekunen, Doreen K. Hom, John E. Alcaraz, Alan Eastman, and Stephen B. Howell.

2688 **Establishment of New SCID and Nude Mouse Models of Human B Leukemia/Lymphoma and Effective Therapy of the Tumors with Immunotoxin and Monoclonal Antibody: Marked Difference between the SCID and Nude Mouse Models in the Antitumor Efficacy of Monoclonal Antibody.** Akira Kawata, Minoru Yoshida, Morihiro Okazaki, Soichiro Yokota, Maurice Barcos, and Ben K. Seon.

2695 **An *in Vivo* Comparison of Oral 5-Iodo-2′-deoxyuridine and 5-Iodo-2-pyrimidinone-2′-deoxyribose Toxicity, Pharmacokinetics, and DNA Incorporation in Athymic Mouse Tissues and the Human Colon Cancer Xenograft, HCT-116.** Timothy J. Kinsella, Keith A. Kunugi, Kathleen A. Vielhuber, William McCulloch, Shwu-Huey Liu, and Yung-Chi Cheng.

2701 **Iododeoxyuridine Chemosensitization of *cis*-Diamminedichloroplatinum(II) in Human Bladder Cancer Cells.** Kwan-Hwa Chi, Keith A. Kunugi, and Timothy J. Kinsella.

2707 **Antiestrogenic Effect of 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin on 17β-Estradiol-induced pS2 Expression.** Tim R. Zacharewski, Karen L. Bondy, Pamela McDonell, and Zhi Fen Wu.

2714 **Antitumor Activity and Pharmacokinetics in Mice of a Recombinant Immunotoxin Containing a Disulfide-stabilized Fv Fragment.** Yoram Reiter, Lee H. Pai, Ulrich Brinkmann, Qing-cheng Wang, and Ira Pastan.

2719 **Intratumoral Generation of 5-Fluorouracil Mediated by an Antibody-Cytosine Deaminase Conjugate in Combination with 5-Fluorocytosine.** Philip M. Wallace, John F. MacMaster, Virginia F. Smith, David E. Kerr, Peter D. Senter, and Wesley L. Cosand.

2724 **Depletion of the *erb*B-2 Gene Product p185 by Benzoquinoid Ansamycins.** Penny Miller, Catherine DiOrio, Mikel Moyer, Rodney C. Schnur, Arthur Bruskin, Walter Cullen, and James D. Moyer.

Immunology

2731 **Cytotoxic T-Lymphocyte Response to Autologous Human Squamous Cell Cancer of the Lung: Epitope Reconstitution with Peptides Extracted from HLA-Aw68.** Craig L. Slingluff, Jr., Andrea L. Cox, John M. Stover, Jr., Marcia M. Moore, Donald F. Hunt, and Victor H. Engelhard.

2738 **Antitumor × Anti-CD3 Bifunctional Antibodies Redirect T-Cells Activated *in Vivo* with Staphylococcal Enterotoxin B to Neutralize Pulmonary Metastases.** Christophe Penna, Phillip A. Dean, and Heidi Nelson.

2744 **Characteristics and *in Vivo* Homing of Long-Term T-Cell Lines and Clones Derived from Tumor-draining Lymph Nodes.** Takafumi Matsumura, Jeffrey J. Sussman, Robert A. Krinock, Alfred E. Chang, and Suyu Shu.

Molecular Biology and Genetics

2751 **Nickel-induced Transformation of Human Cells Causes Loss of the Phosphorylation of the Retinoblastoma Protein.** Xinhua Lin, W. Karol Dowjat, and Max Costa.

2755 **The p53-dependent γ-Ray Response of *GADD45*.** Qimin Zhan, Insoo Bae, Michael B. Kastan, and Albert J. Fornace, Jr.

2761 **Allelotype of Pancreatic Adenocarcinoma.** Albert B. Seymour, Ralph H. Hruban, Mark Redston, Carlos Caldas, Steve M. Powell, Kenneth W. Kinzler, Charles J. Yeo, and Scott E. Kern.

2765 **Genetic Identification of *Mcs-1*, a Rat Mammary Carcinoma Suppressor Gene.** Lih-Ching Hsu, Wendy S. Kennan, Laurie A. Shepel, Howard J. Jacob, Claude Szpirer, Josiane Szpirer, Eric S. Lander, and Michael N. Gould.

Tumor Biology

2771 **Sensitivity of HER-2/*neu* Antibodies in Archival Tissue Samples: Potential Source of Error in Immunohistochemical Studies of Oncogene Expression.** Michael F. Press, Gene Hung, William Godolphin, and Dennis J. Slamon.

2778 **Spontaneous Transformation of Rat Ovarian Surface Epithelial Cells Results in Well to Poorly Differentiated Tumors with a Parallel Range of Cytogenetic Complexity.** Joseph R. Testa, Lori A. Getts, Hernando Salazar, Zemin Liu, Laura M. Handel, Andrew K. Godwin, and Thomas C. Hamilton.

2785 **Induction of Metastatic Ability in a Stably Diploid Benign Rat Mammary Epithelial Cell Line by Transfection with DNA from Human Malignant Breast Carcinoma Cell Lines.** Barry R. Davies, Roger Barraclough, and Philip S. Rudland.

2794 **Fibroblast Growth Factor Receptor Gene Expression and Immunoreactivity Are Elevated in Human Glioblastoma Multiforme.** Richard S. Morrison, Fumio Yamaguchi, Janet M. Bruner, Mark Tang, Wallace McKeehan, and Mitchel S. Berger.

2800 **Neovascularization in Clinical Stage A Testicular Germ Cell Tumor: Prediction of Metastatic Disease.** Dolores Olivarez, Thomas Ulbright, Werner DeRiese, Richard Foster, Terry Reister, Lawrence Einhorn, and George Sledge.

2803 **Human Osteosarcoma Cell Lines Are Dependent on Insulin-like Growth Factor I for *in Vitro* Growth.** Cynthia Chavez Kappel, Maria C. Velez-Yanguas, Steven Hirschfeld, and Lee J. Helman.

Virology

2808 **Ultrastructural Localization of BHRF1: An Epstein-Barr Virus Gene Product Which Has Homology with bcl-2.** Tamas Hickish, David Robertson, Paul Clarke, Mark Hill, Francesca di Stefano, Catherine Clarke, and David Cunningham.

Meeting Report

2812 **Cell Death in Cancer and Development: AACR Special Conference in Cancer Research.** Alan Eastman, Steven Grant, Richard Lock, Thomas Tritton, Nancy Van Houten, Junying Yuan.

2819 Announcements

Future Annual Meetings of the AACR
New Privileges and Responsibilities of Corresponding Membership
Broadening of Associate Membership
AACR Special Conferences in Cancer Research
Calendar of Events

2821 Erratum

M. P. Velders *et al.*, *54:* 1753–1759, 1994.

2822 Author Index

AACR forms available in the back of this issue:

Application for Active and Corresponding Membership

Application for Associate Membership

Also available in the back of this issue:

Guidelines for Submitting Disks to AACR Publications