



CONTENTS

Advances in Brief

- 4443 The Small Heat Shock Protein hsp27 Is Correlated with Growth and Drug Resistance in Human Breast Cancer Cell Lines.** Steffi Oesterreich, Chye-Ning Weng, Ming Qiu, Susan G. Hilsenbeck, C. Kent Osborne, and Suzanne A. W. Fuqua.
- 4449 Detection of the AML1/ETO Fusion Transcript in the t(8;21) Masked Translocation in Acute Myelogenous Leukemia.** Fumio Maruyama, Peirong Yang, Sanford A. Stass, Ann Cork, Emil J Freireich, Ming-Sheng Lee, and Kun-Sang Chang.
- 4452 Dominant Negative Effect of a Germ-line Mutant p53: A Step Fostering Tumorigenesis.** Shiv Srivastava, Shouwen Wang, Yue Ao Tong, Zheng-Mei Hao, and Esther H. Chang.
- 4456 Comparison of Loss of Heterozygosity Patterns in Invasive Low-Grade and High-Grade Epithelial Ovarian Carcinomas.** Mark K. Dodson, Lynn C. Hartmann, William A. Cliby, Karen A. DeLacey, Gary L. Keeney, Steve R. Ritland, John Q. Su, Karl C. Podratz, and Robert B. Jenkins.
- 4461 Dietary Fenretinide, a Synthetic Retinoid, Decreases the Tumor Incidence and the Tumor Mass of ras+myc-induced Carcinomas in the Mouse Prostate Reconstitution Model System.** K. Slawin, D. Kadmon, S. H. Park, P. T. Scardino, M. Anzano, M. B. Sporn, and T. C. Thompson.
- 4466 Induction of Protein-DNA Complexes in HeLa S3 Cells by KW-2149, a New Derivative of Mitomycin C.** Noboru Fujii, Hitoshi Arai, Hiromitsu Saito, Masaji Kasai, and Hirofumi Nakano.
- 4469 Redox Modulation of p53 Conformation and Sequence-specific DNA Binding *in Vitro*.** Pierre Hainaut and Jo Milner.
- 4474 Activation of Phospholipase D Participates in Signal Transduction Pathways Responsive to γ -Radiation.** Matías A. Avila, Gabriel Otero, José Cansado, Anatoly Dritschilo, Juan A. Velasco, and Vicente Notario.
- 4477 The Incidence of p53 Mutations Increases with Progression of Head and Neck Cancer.** Jay O. Boyle, John Hakim, Wayne Koch, Peter van der Riet, Ralph H. Hruban, R. Arturo Roa, Russell Correo, Yolanda J. Eby, J. Michael Ruppert, and David Sidransky.
- 4481 Human Immunodeficiency Virus Type 1 Tat Protein Protects Lymphoid, Epithelial, and Neuronal Cell Lines from Death by Apoptosis.** Giorgio Zauli, Davide Gibellini, Daniela Milani, Meri Mazzoni, Paola Borgatti, Michele La Placa, and Silvano Capitani.
- 4486 Refinement of Regional Loss of Heterozygosity for Chromosome 11p15.5 in Human Breast Tumors.** Robert Winqvist, Arto Mannermaa, Martti Alavaikko, Guillermo Blanco, Pentti J. Taskinen, Heikki Kiviniemi, Irene Newsham, and Webster Cavenee.

- 4489 Potential Topoisomerase II DNA-binding Sites at the Breakpoints of a t(9;11) Chromosome Translocation in Acute Myeloid Leukemia.** M. Negrini, C. A. Felix, C. Martin, B. J. Lange, T. Nakamura, E. Canaani, and C. M. Croce.

Regular Articles

Biochemistry and Biophysics

- 4493 Secretion of Matrix Metalloproteinases and Their Inhibitors (Tissue Inhibitor of Metalloproteinases) by Human Prostate in Explant Cultures: Reduced Tissue Inhibitor of Metalloproteinase Secretion by Malignant Tissues.** Balakrishna L. Lokeshwar, Marie G. Selzer, Norman L. Block, and Zeenat Gunja-Smith.

Carcinogenesis

- 4499 Ability of Aberrant Crypt Foci Characteristics to Predict Colonic Tumor Incidence in Rats Fed Cholic Acid.** Bernadene A. Magnuson, Ian Carr, and Ranjana P. Bird.
- 4505 Singlet Oxygen: A Primary Effector in the Ultraviolet A/Near-Visible Light Induction of the Human Heme Oxygenase Gene.** Sharmila Basu-Modak and Rex M. Tyrrell.
- 4511 Human Papillomavirus 16 Immortalization of Normal Human Ectocervical Epithelial Cells Alters Retinoic Acid Regulation of Cell Growth and Epidermal Growth Factor Receptor Expression.** Nywana Sizemore and Ellen A. Rorke.
- 4518 Chronic Radiation-induced Alteration in Hematopoietic Repair during Preclinical Phases of Aplastic Anemia and Myeloproliferative Disease: Assessing Unscheduled DNA Synthesis Responses.** Thomas M. Seed and Susan M. Meyers.
- 4528 Inhibition of Oxidative Stress in HeLa Cells by Chemopreventive Agents.** Ramesh S. Bhimani, Walter Troll, Dezider Grunberger, and Krystyna Frenkel.
- 4534 Major Difference in the Hepatocarcinogenicity and DNA Adduct Forming Ability between Toremifene and Tamoxifen in Female Crl:CD(BR) Rats.** Gordon C. Hard, Michael J. Iatropoulos, Kevin Jordan, Leila Radi, Olgierd P. Kaltenberg, Anthony R. Imondi, and Gary M. Williams.
- 4542 Regulation of Protein Kinase C Isozymes in Kidney Regeneration.** Liqun Dong, James L. Stevens, Dorian Fabbro, and Susan Jaken.

Clinical Investigations

- 4550 Expression and Prognostic Significance of Platelet-derived Growth Factor and Its Receptors in Epithelial Ovarian Neoplasms.** Rudi Henriksen, Keiko Funa, Erik Wilander, Torbjörn Bäckström, Mona Ridderheim, and Kjell Öberg.

4555 **A Phase I Clinical Trial of Murine Monoclonal Antibody D612 in Patients with Metastatic Gastrointestinal Cancer.** Mansoor N. Saleh, M. B. Khazaeli, William E. Grizzle, Richard H. Wheeler, Sharon Lawson, Tiepu Liu, Charles Russell, Ruby Meredith, Jeffrey Schlom, and Albert E. LoBuglio.

Endocrinology

4563 **Inhibition of the *in Vivo* Conversion of Androstenedione to Estrone by the Aromatase Inhibitor Vorozole in Healthy Postmenopausal Women.** Elsken van der Wall, Truus H. Donker, Edwin de Frankrijker, Hans W. R. Nortier, Jos H. H. Thijssen, and Marinus A. Blankenstein.

Experimental Therapeutics

4567 **Modulation of Cytotoxicity and Cellular Pharmacology of 1,2-Diaminocyclohexane Platinum(IV) Complexes Mediated by Axial and Equatorial Ligands.** Yuichiro Kido, Abdul R. Khokhar, Salaam Al-Baker, and Zahid H. Siddik.

4573 **Estramustine Depolymerizes Microtubules by Binding to Tubulin.** Björn Dahllöf, Anita Billström, Fernando Cabral, and Beryl Hartley-Asp.

4582 **Effect of a Template-located 2',2'-Difluorodeoxycytidine on the Kinetics and Fidelity of Base Insertion by Klenow (3'→5' Exonuclease⁻) Fragment.** William E. Schy, Larry W. Hertel, Julian S. Kroin, Linda B. Bloom, Myron F. Goodman, and Frank C. Richardson.

4588 **Polyethylene Glycol-modified Chimeric Toxin Composed of Transforming Growth Factor α and *Pseudomonas* Exotoxin.** Qing-cheng Wang, Lee H. Pai, Waldemar Debinski, David J. FitzGerald, and Ira Pastan.

4595 ***In Vitro* and *in Vivo* Reversal of Multidrug Resistance by GF120918, an Acridonecarboxamide Derivative.** François Hyafil, Catherine Vergely, Pierre Du Vignaud, and Thierry Grand-Perret.

4603 **Cardioprotective Properties of *O*-(β -Hydroxyethyl)-rutosides in Doxorubicin-pretreated BALB/c Mice.** Saskia A. B. E. van Acker, Emile E. Voest, Dolf B. Beems, Henk T. Madhuizen, Jan de Jong, Aalt Bast, and Wim J. F. van der Vijgh.

4608 **Main Drug- and Carcinogen-metabolizing Enzyme Systems in Human Non-Small Cell Lung Cancer and Peritumoral Tissues.** Caroline Toussaint, Nicolas Albin, Liliane Massaad, Dominique Grunenwald, Orlando Parise, Jr., Jackie Morizet, Alain Gouyette, and Guy G. Chabot.

4613 **Caffeine Prevents Apoptosis and Cell Cycle Effects Induced by Camptothecin or Topotecan in HL-60 Cells.** Frank Traganos, Jan Kapuscinski, Jianping Gong, Barbara Ardelt, Robert J. Darzynkiewicz, and Zbigniew Darzynkiewicz.

4619 ***In Vivo* Antitumor Activity of 5-Fluorocytosine on Human Colorectal Carcinoma Cells Genetically Modified to Express Cytosine Deaminase.** Brian E. Huber, Elizabeth A. Austin, Steven S. Good, Vincent C. Knick, Stephen Tibbels, and Cynthia A. Richards.

4627 **Reversible Inhibition of Proliferation of Epithelial Cell Lines by *Agaricus bisporus* (Edible Mushroom) Lectin.** Lugang Yu, David G. Fernig, John A. Smith, Jeremy D. Milton, and Jonathan M. Rhodes.

4633 **Tumor-specific, Schedule-dependent Interaction between Tirapazamine (SR 4233) and Cisplatin.** Mary Jo Dorie and J. Martin Brown.

4637 **Antitumor Effect of Anti-Epidermal Growth Factor Receptor Monoclonal Antibodies plus *cis*-Diamminedichloroplatinum on Well Established A431 Cell Xenografts.** Zhen Fan, Jose Baselga, Hideo Masui, and John Mendelsohn.

Immunology

4643 **Inhibitory Effect of Interleukin 4 on Production of Interleukin 6 by Adult T-Cell Leukemia Cells.** Naoki Mori, Fumihiko Shirakawa, Shuichi Murakami, Susumu Oda, and Sumiya Eto.

4648 **Immune Reactions against Hepatitis B Viral Antigens Lead to the Rejection of Hepatocellular Carcinoma in BALB/c Mice.** Shu-Hsia Chen, Cheng-po Hu, Chien-Kuo Lee, and Chungming Chang.

4652 **Interferon- γ -induced Intercellular Adhesion Molecule-1: Expression on Human Tumor Cells Enhances Bifunctional Antibody-mediated Lysis through a Lymphocyte Function-associated Antigen-1 Dependent Mechanism.** Patrick S. Ramsey, Phillip A. Dean, Aliza Tasimowicz-Alpini, John H. Donohue, and Heidi Nelson.

Molecular Biology and Genetics

4658 **Effect of Verapamil on Doxorubicin Cardiotoxicity: Altered Muscle Gene Expression in Cultured Neonatal Rat Cardiomyocytes.** Hajime Akimoto, Nicholas A. Bruno, Doris L. Slate, Margaret E. Billingham, Suzy V. Torti, and Frank M. Torti.

4665 ***p53* Mutations and Histological Type of Invasive Breast Carcinoma.** Antonio Marchetti, Fiamma Buttitta, Silvia Pellegrini, Daniela Campani, Francesca Diella, Denise Cecchetti, Robert Callahan, and Maria Bistocchi.

4670 **Up-Regulation of Lysyl Oxidase in Spontaneous Revertants of *H-ras*-transformed Rat Fibroblasts.** Alex Hajnal, Roman Klemenz, and Reinhold Schäfer.

4676 **Clonal Analysis by Study of X Chromosome Inactivation in Formalin-fixed Paraffin-embedded Tissue.** Robert D. Mashal, Susan C. Lester, and Jeffrey Sklar.

Tumor Biology

4680 **Role for Membrane and Secreted Insulin-like Growth Factor-binding Protein-2 in the Regulation of Insulin-like Growth Factor Action in Lung Tumors.** Julie G. Reeve, Julie Morgan, Jurg Schwander, and Norman M. Bleehen.

4686 **Effect of Diets Containing Different Levels of Linoleic Acid on Human Breast Cancer Growth and Lung Metastasis in Nude Mice.** David P. Rose, Mary Ann Hatala, Jeanne M. Connolly, and Jodie Rayburn.

4691 **Expression of *p53* Gene in 184 Unifocal Hepatocellular Carcinomas: Association with Tumor Growth and Invasiveness.** Hey-Chi Hsu, Hwai-Jung Tseng, Po-Lin Lai, Po-Huang Lee, and Shian-Yang Peng.

4695 **Role of Platelet Membrane Glycoproteins Ib/IX and IIb/IIIa, and of Platelet α -Granule Proteins in Platelet Aggregation Induced by Human Osteosarcoma Cells.** Philippe Clezardin, Jeanne Drouin, Marie-Christine Morel-Kopp, Michel Hanss, Beate Kehrel, Claire-Marie Serre, Cécile Kaplan, and Pierre D. Delmas.

4701 Investigation of the Subcellular Distribution of the *bcl-2* Oncoprotein: Residence in the Nuclear Envelope, Endoplasmic Reticulum, and Outer Mitochondrial Membranes. Stanislaw Krajewski, Shigeaki Tanaka,^{2,3} Shinichi Takayama, Matthew J. Schibler, Wayne Fenton, and John C. Reed.

4715 Immunodetection of Endogenous Opioid Peptides in Human Brain Tumors and Associated Cyst Fluids. Thierry Gustin, Thomas Bachelot, Jean-Marc G. Verna, Laurent F. Molin, Jean-François M. Brunet, François R. Berger, and Alim L. Benabid.

4720 A Novel M_r 32,000 Nuclear Phosphoprotein Is Selectively Expressed in Cells Competent for Self-Renewal. Loren D. Walensky, Donald S. Coffey, Tseng-Hui Chen, Tzyy-Chouu Wu, and Gary R. Pasternack.

4727 Expression of Vascular Permeability Factor (Vascular Endothelial Growth Factor) and Its Receptors in Adenocarcinomas of the Gastrointestinal Tract. Lawrence F. Brown, Brygida Berse, Robert W. Jackman, Kathi Tognazzi, Eleanor J. Manseau, Donald R. Senger, and Harold F. Dvorak.

4736 Announcements

New Schedule for Annual Meetings of the AACR Beginning in 1994
New Privileges and Responsibilities of Corresponding Membership
Broadening of Associate Membership
Call for Suggestions for Association Officers and Directors
AACR Special Conferences in Cancer Research
Calendar of Events

4738 Erratum

M. H. el Kouni *et al.*, 53: 3687–3693, 1993.

4739 Author Index

Pages 1s–26s

**Call for Abstracts for 1994
AACR Annual Meeting**

**Includes: Abstract Submission Forms
Advance Registration and
Housing Forms**

**Also available in the back
of this issue:**

**Application for Active and
Corresponding Membership**

**Application for Associate
Membership**

**Guidelines for Submitting Disks to
AACR Publications**

Cancer Research

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

53 (19)

Cancer Res 1993;53:4443-4738.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/53/19.citation>

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/53/19.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.