



CONTENTS

Advances in Brief

- 459 **Sequential Coexpression of the Multidrug Resistance Genes *MRP* and *mdr1* and Their Products in VP-16 (Etoposide)-selected H69 Small Cell Lung Cancer Cells.** Inger Brock, David R. Hipfner, Boye S. Nielsen, Peter B. Jensen, Roger G. Deeley, Susan P. C. Cole, and Maxwell Shested.
- 463 **Cytotoxic T Cells Overcome BCR-ABL-mediated Resistance to Apoptosis.** Ephraim J. Fuchs, Atul Bedi, Richard J. Jones, and Allan D. Hess.
- 467 **Identical Allelic Loss on Chromosome 11q13 in Microdissected *in Situ* and Invasive Human Breast Cancer.** Zhengping Zhuang, Maria J. Merino, Rodrigo Chuaqui, Lance A. Liotta, and Michael R. Emmert-Buck.
- 472 **A Specific African-American *CYP1A1* Polymorphism Is Associated with Adenocarcinoma of the Lung.** Emanuela Taioli, Frances Crofts, Julie Trachman, Rita Demopoulos, Paolo Toniolo, and Seymour J. Garte.
- 474 **Metallothionein Localization and Cisplatin Resistance in Human Hormone-independent Prostatic Tumor Cell Lines.** Yukihiro Kondo, Shiu-Ming Kuo, Simon C. Watkins, and John S. Lazo.
- 478 **Methotrexate- α -Phenylalanine: Optimization of Methotrexate Prodrug for Activation by Carboxypeptidase A-Monoclonal Antibody Conjugate.** Karin S. Vitols, Brigitte Haag-Zeino, Thomas Baer, Yolanda D. Montejano, and F. M. Huennekens.
- 482 **Pharmacokinetics of 9-*cis*-Retinoic Acid in the Rhesus Monkey.** Peter C. Adamson, Robert F. Murphy, Karen A. Godwin, Edgar H. Ulm, and Frank M. Balis.
- 486 **Apoptin, a Protein Derived from Chicken Anemia Virus, Induces p53-independent Apoptosis in Human Osteosarcoma Cells.** Shi-Mei Zhuang, Avi Shvarts, Hans van Ormondt, Aart G. Jochemsen, Alex J. van der Eb, and Mathieu H. M. Noteborn.
- 490 **Evidence for a Multifocal Origin of Papillary Serous Carcinoma of the Peritoneum.** Michael G. Muto, William R. Welch, Samuel Chi-Ho Mok, Christina A. Bandera, Paula M. Fishbaugh, Sai-Wah Tsao, Ching C. Lau, Howard M. Goodman, Robert C. Knapp, and Ross S. Berkowitz.
- 493 **Increased p16 Levels Correlate with pRb Alterations in Human Urothelial Cells.** Thomas Yeager, Walter Stadler, Cassandra Belair, Jairaj Puthenveetil, Olufunmilayo Olopade, and Catherine Reznikoff.
- 498 **Variant Estrogen Receptor Messenger RNA Species Detected in Human Primary Hepatocellular Carcinoma.** Erica Villa, Lorenzo Camellini, Aisha Dugani, Fabrizio Zucchi, Antonella Grottola, Annalisa Merighi, Paola Buttafoco, Lorena Losi, and Federico Manenti.
- 501 **Acceleration of Apoptosis in Transforming Growth Factor β 1-treated M1 Cells Ectopically Expressing B-*myb*.** Juraj Bies and Linda Wolff.
- 505 **Reciprocal Rb Inactivation and p16^{INK4} Expression in Primary Lung Cancers and Cell Lines.** Geoffrey I. Shapiro, Christian D. Edwards, Lester Kobzik, John Godleski, William Richards, David J. Sugarbaker, and Barrett J. Rollins.
- 510 **Different Angiogenic Pathways Characterize Superficial and Invasive Bladder Cancer.** Tim O'Brien, David Cranston, Susan Fuggle, Roy Bicknell, and Adrian L. Harris.

- 514 ***In Vivo* Occurrence of p16 (MTS1) and p15 (MTS2) Alterations Preferentially in Non-Small Cell Lung Cancers.** Osuke Washimi, Masaaki Nagatake, Hiroataka Osada, Ryuzo Ueda, Takashi Koshikawa, Tsuneo Seki, Toshitada Takahashi, and Takashi Takahashi.

Regular Articles

Biochemistry and Biophysics

- 518 **Translocation and Activation of Protein Kinase C by the Plasma Cell Tumor-promoting Alkane Pristane.** Siegfried Janz, Klaus Gawrisch, and David S. Lester.

Carcinogenesis

- 525 **Metabolic Activation of *N*-Hydroxy Arylamines and *N*-Hydroxy Heterocyclic Amines by Human Sulfotransferase(s).** H-C. Chou, N. P. Lang, and F. F. Kadlubar.
- 530 **Autocrine Growth Stimulation by Transforming Growth Factor α in Asbestos-transformed Rat Mesothelial Cells.** Cheryl Walker, Jeffrey Everitt, Patrice C. Ferriola, Wendy Stewart, James Mangum, and Edilberto Bermudez.
- 537 **Evaluation of Chemopreventive Agents in Different Mechanistic Classes Using a Rat Tracheal Epithelial Cell Culture Transformation Assay.** Julia T. Arnold, Betty P. Wilkinson, Sheela Sharma, and Vernon E. Steele.
- 544 **Tamoxifen Induces Short-Term Cumulative DNA Damage and Liver Tumors in Rats: Promotion by Phenobarbital.** Philip Carthew, Elizabeth A. Martin, Ian N. H. White, Francesco De Matteis, Richard E. Edwards, Barbara M. Dorman, Robert T. Heydon, and Lewis L. Smith.

Endocrinology

- 548 **Modulator Inhibits Nuclear Translocation of the Glucocorticoid Receptor and Inhibits Glucocorticoid-induced Apoptosis in the Human Leukemic Cell Line CEM C-7.** Noreen M. Robertson, Peter V. N. Bodine, Tin-Chen Hsu, Emad S. Alnemri, and Gerald Litwack.

Epidemiology

- 557 **A Case-Control Study of Nonrandom Distribution of Bleomycin-induced Chromatid Breaks in Lymphocytes of Lung Cancer Cases.** Xifeng Wu, T.C. Hsu, John F. Annegers, Christopher I. Amos, John J. Fueger, and Margaret R. Spitz.
- 562 **Age at Establishment of *Helicobacter pylori* Infection and Gastric Carcinoma, Gastric Ulcer, and Duodenal Ulcer Risk.** Martin J. Blaser, P. H. Chyou, and Abraham Nomura.

Experimental Therapeutics

- 566 **Multifactorial Resistance to 5,10-Dideazatetrahydrofolic Acid in Cell Lines Derived from Human Lymphoblastic Leukemia CCRF-CEM.** Giuseppe Pizzorno, Barbara A. Moroson, Arlene R. Cashmore, Orsolina Russello, Jennifer R. Mayer, John Galivan, Marlene A. Bunni, David G. Priest, and G. Peter Beardsley.

- 574 *N*-[2-(2-Methyl-5-nitroimidazolyl)ethyl]-4-(2-nitroimidazolyl)butanamide (NSC 639862), a Bisnitroimidazole with Enhanced Selectivity as a Bioreductive Drug. John W. Moselen, Michael P. Hay, William A. Denny, and William R. Wilson.
- 581 Intratumoral Activation and Enhanced Chemotherapeutic Effect of Oxazaphosphorines following Cytochrome P-450 Gene Transfer: Development of a Combined Chemotherapy/Cancer Gene Therapy Strategy. Ling Chen and David J. Waxman.
- 590 Sensitization of Human Renal Cell Carcinoma Cells to *cis*-Diamminedichloroplatinum(II) by Anti-Interleukin 6 Monoclonal Antibody or Anti-Interleukin 6 Receptor Monoclonal Antibody. Youichi Mizutani, Benjamin Bonavida, Yasuo Koishihara, Ken-ichi Akamatsu, Yoshiyuki Ohsugi, and Osamu Yoshida.
- 597 *In Vivo* Enhanced Antitumor Activity of Carmustine [*N,N'*-Bis(2-chloroethyl)-*N*-nitrosourea] by Simvastatin. Maurizio R. Soma, Roberta Baetta, M. Rita De Renzis, Giuliano Mazzini, Cecilia Davegna, Lorenzo Magrassi, Giorgio Butti, Stefano Pezzotta, Rodolfo Paoletti, and Remo Fumagalli.
- 603 *In Vivo* Antitumor Activity of Two New Seven-substituted Water-soluble Camptothecin Analogues. David L. Emerson, Jeffrey M. Besterman, H. Roger Brown, Michael G. Evans, Peter P. Leitner, Michael J. Luzzio, Joel E. Shaffer, Daniel D. Sternbach, David Uehling, and Alain Vuong.

Immunology

- 610 Anti-CD54 (ICAM-1) Has Antitumor Activity in SCID Mice with Human Myeloma Cells. Yi-Wu Huang, James A. Richardson, and Ellen S. Vitetta.
- 617 Role of Natural Killer Cells in Psychosocial Stressor-induced Changes in Mouse Mammary Tumor Growth. Gerald J. Rowse, Joanne Weinberg, and Joanne T. Emerman.
- 623 Antibody-targeted Superantigens Induce Lysis of Major Histocompatibility Complex Class II-negative T-Cell Leukemia Lines. Johannes Ihle, Ursula Holzer, Frauke Krull, Mikael Dohlsten, Terje Kalland, Dietrich Niethammer, and Günther E. Dannecker.

Molecular Biology and Genetics

- 629 Negative Growth Control of HeLa Cells by Connexin Genes: Connexin Species Specificity. M. Mesnil, V. Krutovskikh, C. Piccoli, C. Elfgang, O. Traub, K. Willecke, and H. Yamasaki.
- 640 Detection of Chromosomal Breakage in the 1cen-1q12 Region of Interphase Human Lymphocytes Using Multicolor Fluorescence *in Situ* Hybridization with Tandem DNA Probes. Doppalapudi S. Rupa, Leslie Hasegawa, and David A. Eastmond.

- 646 *p53* Abnormalities and Genomic Instability in Primary Human Breast Carcinomas. Jorunn E. Eyfjörd, Steinunn Thorlacius, Margret Steinarsdottir, Rut Valgardsdottir, Helga M. Ögmundsdottir, and Kesara Ananthawat-Jonsson.
- 652 *NM23-H1* and *NM23-H2* Messenger RNA Abundance in Human Hepatocellular Carcinoma. Norio Iizuka, Masaaki Oka, Takafumi Noma, Atsushi Nakazawa, Kunitaka Hirose, and Takashi Suzuki.
- 658 Mutations of the *p53* Gene and *p53* Protein Overexpression Are Associated with Sarcomatoid Transformation in Renal Cell Carcinomas. Hideaki Oda, Yoko Nakatsuru, and Takatoshi Ishikawa.
- 663 Effect of a Mutation at Tyrosine 950 of the Insulin-like Growth Factor I Receptor on the Growth and Transformation of Cells. Masahiko Miura, Shiwei Li, and Renato Baserga.
- 668 *p53*-independent Induction of *WAF1/CIP1* in Human Leukemia Cells Is Correlated with Growth Arrest Accompanying Monocyte/Macrophage Differentiation. Wei Zhang, Luigi Grasso, Craig D. McClain, Anne M. Gambel, Ying Cha, Salvatore Travali, Albert B. Deisseroth, and W. Edward Mercer.

Tumor Biology

- 675 High Rates of Thioredoxin Secretion Correlate with Growth Arrest in Hepatoma Cells. Anna Rubartelli, Neris Bonifaci, and Roberto Sitia.
- 681 Host Organ Specifically Determines Cancer Progression. Shinji Togo, Hiroshi Shimada, Tetsuro Kubota, A. R. Moossa, and Robert M. Hoffman.
- 685 *In Vivo* Local Expansion of Clonal T Cell Subpopulations in Renal Cell Carcinoma. Catherine Gaudin, Pierre-Yves Dietrich, Sylvie Robache, Maryvonne Guillard, Bernard Escudier, Marie-Josée Terrier Lacombe, Anil Kumar, Frédéric Triebel, and Anne Caignard.
- 691 Induction of Apoptosis by Sphingosine in Human Leukemic HL-60 Cells: A Possible Endogenous Modulator of Apoptotic DNA Fragmentation Occurring during Phorbol Ester-induced Differentiation. Hideki Ohta, Elizabeth A. Sweeney, Atsushi Masamune, Yutaka Yatomi, Sen-itiroh Hakomori, and Yasuyuki Igarashi.
- 698 Solid Tumor Cells Express Functional "Tethered Ligand" Thrombin Receptor. M. Z. Wojtukiewicz, D. G. Tang, E. Ben-Josef, C. Renaud, D. A. Walz, and K. V. Honn.

Meeting Reports

- 705 Fifth Heidelberg Conference on Targets for Cancer Research: Prevention, Differentiation, and Selective Therapy. John S. Bertram.
- 710 Genetic Polymorphism and Cancer Susceptibility: Fourteenth Sapporo Cancer Seminar. Frank J. Gonzalez.

716 Announcements

Late-Breaking Research Session
at the AACR Annual Meeting
Future Annual Meetings of the AACR
Gertrude Elion Cancer Research Award
Workshop on Histopathobiology of
Cancer
Workshop on Molecular Biology in
Clinical Oncology
Workshop on Methods in Clinical Cancer
Research
AACR Special Conferences in Cancer
Research
Calendar of Events

719 Correction

S. Yuan *et al.*, 53: 1304-1311, 1993.

720 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:

Advance Registration Form for the
86th Annual Meeting
Guidelines for Submitting Disks to
AACR Publications
Educational Sessions and Methods
Workshops at the 86th Annual
Meeting

Cancer Research

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

55 (3)

Cancer Res 1995;55:459-719.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/55/3.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/55/3.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.