



CONTENTS

Advances in Brief

- 5251 Expression of μ Class Glutathione S-Transferase Correlates with Event-free Survival in Childhood Acute Lymphoblastic Leukemia.** Andrew G. Hall, Pernille Autzen, Alex R. Cattan, Archibald J. Malcolm, Michael Cole, Jennifer Kernahan, and Michael M. Reid.
- 5255 Modulation of Resistance to Anticancer Drugs by Inhibition of Metallothionein Synthesis.** Masahiko Satoh, M. George Cherian, Nobumasa Imura, and Hidesuke Shimizu.
- 5258 Gene Therapy for Carcinoembryonic Antigen-producing Human Lung Cancer Cells by Cell Type-specific Expression of Herpes Simplex Virus Thymidine Kinase Gene.** Tadashi Osaki, Yoshiro Tani, Isao Tachibana, Shigeto Hosoe, Toru Kumagai, Ichiro Kawase, Shinzo Oikawa, and Tamamitsu Kishimoto.
- 5262 Mutational Analysis of *CDKN2* (*MTS1/p16^{ink4}*) in Human Breast Carcinomas.** Lin Xu, Dennis Sgroi, Christopher J. Sterner, Roberta L. Beauchamp, Denise M. Pinney, Suzanne Keel, Keisuke Ueki, Joni L. Rutter, Alan J. Buckler, David N. Louis, James F. Gusella, and Vijaya Ramesh.
- 5265 Identification of MART-1-specific T-Cell Receptors: T Cells Utilizing Distinct T-Cell Receptor Variable and Joining Regions Recognize the Same Tumor Epitope.** David J. Cole, Daniel P. Weil, Peter Shamamian, Licia Rivoltini, Yutaka Kawakami, Suzanne Topalian, Christopher Jennings, Siona Eliyahu, Steven A. Rosenberg, and Michael I. Nishimura.
- 5269 Rarity of Somatic and Germline Mutations of the Cyclin-dependent Kinase 4 Inhibitor Gene, *CDK4I*, in Melanoma.** Masataka Ohta, Hirokazu Nagai, Masayoshi Shimizu, Debora Rasio, David Berd, Michael Mastrangelo, Arun D. Singh, Jerry A. Shields, Carol L. Shields, Carlo M. Croce, and Kay Huebner.
- 5273 Hypoxic Activation of Nuclear Factor- κ B Is Mediated by a *Ras* and *Raf* Signaling Pathway and Does Not Involve MAP Kinase (ERK1 or ERK2).** Albert C. Koong, Eunice Y. Chen, Nahid F. Mivechi, Nicholas C. Denko, Peter Stambrook, and Amato J. Giaccia.
- 5280 Epidermal Growth Factor-mediated Apoptosis of MDA-MB-468 Human Breast Cancer Cells.** Deborah K. Armstrong, Scott H. Kaufmann, Yvonne L. Ottaviano, Yuzo Furuya, Julie A. Buckley, John T. Isaacs, and Nancy E. Davidson.

Public Issues

- 5284 Smoking and Lung Cancer: Scientific Challenges and Opportunities.** Ernst L. Wynder and Dietrich Hoffmann.

Perspectives in Cancer Research

- 5296 Cancers Beget Mutations versus Mutations Beget Cancers.** Richmond T. Prehn.

Review

- 5301 Monoclonal Antibodies as Agonists: An Expanded Role for Their Use in Cancer Therapy.** Ellen S. Vitetta and Jonathan W. Uhr.

Regular Articles

Carcinogenesis

- 5310 Harvey *ras* (*H-ras*) Point Mutations Are Induced by 4-Nitroquinoline-1-oxide in Murine Oral Squamous Epithelia, while Squamous Cell Carcinomas and Loss of Heterozygosity Occur without Additional Exposure.** Bo Yuan, Briana W. Heniford, Douglas M. Ackermann, Brian L. Hawkins, and Fred J. Hendler.
- 5318 A Role for Metallothionein and Zinc in Spontaneous Mutagenesis.** Ekaterina I. Goncharova and Toby G. Rossman.
- 5324 Orotic Acid Enhancement of Preneoplastic and Neoplastic Lesions Induced in the Pancreas and Liver of Hamsters by *N*-Nitroso(2-hydroxypropyl) (2-oxopropyl)amine.** Demetrius M. Kokkinakis and Jorge Albores-Saavedra.
- 5333 Isoprene, an Endogenous Hydrocarbon and Industrial Chemical, Induces Multiple Organ Neoplasia in Rodents after 26 Weeks of Inhalation Exposure.** Ronald L. Melnick, Robert C. Sills, Joseph H. Roycroft, Billy J. Chou, Harvey A. Ragan, and Rodney A. Miller.
- 5340 Mutagenesis of *ras* Proto-Oncogenes in Rat Liver Tumors Induced by Vinyl Chloride.** Olivier Froment, Sandra Boivin, Alain Barbin, Brigitte Bancel, Christian Trepo, and Marie-Jeanne Marion.

Clinical Investigations

- 5346 Ifosfamide and Carboplatin Combined with 41.8°C Whole-Body Hyperthermia in Patients with Refractory Sarcoma and Malignant Teratoma.** Günter J. Wiedemann, Floriane d'Oleire, Erdmute Knop, Sawas Eleftheriadis, Peter Bucsky, Stephanie Feddersen, Miriam Klouche, Jürgen Geisler, Martin Mentzel, Peter Schmucker, Thomas Feyerabend, Christoph Weiss, and Thomas Wagner.
- 5351 Intratumor Variability in Prognostic Indicators May Be the Cause of Conflicting Estimates of Patient Survival and Response to Therapy.** Sam C. Barranco, Roger R. Perry, Mary E. Durm, Alice L. Werner, Sharon G. Gregorcyk, Wade E. Bolton, Paul Kolm, and Courtney M. Townsend, Jr.
- 5357 Recruitment with High Physiological Doses of Estradiol Preceding Chemotherapy: Flow Cytometric and Therapeutic Results in Women with Locally Advanced Breast Cancer—A Southwest Oncology Group Study.** Carol J. Fabian, Bruce F. Kimler, Richard McKittrick, Chan H. Park, Fritz Lin, Leela Krishnan, William R. Jewell, C. Kent Osborne, Silvana Martino, Laura F. Hutchins, Lucille A. Leong, and Stephanie Green.

Endocrinology

- 5363 Reproducibility of Laboratory Assays for Steroid Hormones and Sex Hormone-binding Globulin.** Nancy Potischman, Roni T. Falk, Virginia A. Laiming, Pentti K. Siitari, and Robert N. Hoover.

Experimental Therapeutics

- 5368 Effects of Amiodarone, Cyclosporin A, and PSC 833 on the Cytotoxicity of Mitoxantrone, Doxorubicin, and Vincristine in Non-P-glycoprotein Human Small Cell Lung Cancer Cell Lines.** Winette T. A. van der Graaf, Elisabeth G. E. de Vries, Hetty Timmer-Bosscha, Gert Jan Meersma, Geert Mesander, Edo Vellenga, and Nanno H. Mulder.

- 5374 **Effects of Photodynamic Therapy Using Mono-L-aspartyl Chlorin e_6 on Vessel Constriction, Vessel Leakage, and Tumor Response.** Kimberly S. McMahon, T. Jeffery Wieman, Pamela H. Moore, and Victor H. Finger.
- 5380 **Potential by Interleukin 1 α of Cisplatin and Carboplatin Antitumor Activity: Schedule-dependent and Pharmacokinetic Effects in the RIF-1 Tumor Model.** Ming-Jei Chang, Wei-Dong Yu, Leonard M. Reyno, Ruth A. Modzelewski, Merrill J. Egorin, Kadir Erkmen, Daniel R. Vlock, Philip Furmanski, and Candace S. Johnson.
- 5387 **6-Thioguanine-induced Growth Arrest in 6-Mercaptopurine-resistant Human Leukemia Cells.** Claudia J. Morgan, Rehan N. Chawdry, Andrea R. Smith, Gina Siravo-Sagraves, and Ronald W. Trewyn.
- 5394 **The Role of DNA Damage in the Resistance of Human Chronic Myeloid Leukemia Cells to Cyclophosphamide Analogues.** Borje S. Andersson, Mohamad Mroue, Richard A. Britten, and David Murray.
- 5401 **Human Cytidine Deaminase: Purification of Enzyme, Cloning, and Expression of Its Complementary DNA.** Josée Laliberté and Richard L. Mompalmer.
- 5408 **Enhancer Sequences of the DF3 Gene Regulate Expression of the Herpes Simplex Virus Thymidine Kinase Gene and Confer Sensitivity of Human Breast Cancer Cells to Ganciclovir.** Yoshinobu Manome, Miyako Abe, Martin F. Hagen, Howard A. Fine, and Donald W. Kufe.
- 5414 **Cytotoxicity of α -Particle-emitting m -[^{211}At]Astatobenzylguanidine on Human Neuroblastoma Cells.** Donald K. Strickland, Ganesan Vaidyanathan, and Michael R. Zalutsky.

Immunology

- 5420 **B7-1/CD80-transduced Tumor Cells Elicit Better Systemic Immunity than Wild-Type Tumor Cells Admixed with *Corynebacterium parvum*.** Lieping Chen, Patrick McGowan, Stephanie Ashe, Janet V. Johnston, Ingegerd Hellström, and Karl Erik Hellström.
- 5424 **T Cells from Renal Cell Carcinoma Patients Exhibit an Abnormal Pattern of κB -specific DNA-binding Activity: A Preliminary Report.** Xiaoli Li, Jun Liu, Jeong-Kyu Park, Thomas A. Hamilton, Patricia Rayman, Eric Klein, Mark Edinger, Raymond Tubbs, Ronald Bukowski, and James Finke.
- 5438 **Structural Analysis of the Ras GTPase Activating Protein Catalytic Domain by Semirandom Mutagenesis: Implications for a Mechanism of Interaction with Ras-GTP.** Lisa Hettich and Mark Marshall.

Tumor Biology

- 5445 **Tissue Distribution of Soluble and Receptor-Bound Urokinase in Human Breast Cancer Using a Panel of Monoclonal Antibodies.** Maria V. Carriero, Paola Franco, Silvana Del Vecchio, Ornella Massa, Gerardo Botti, Giuseppe D' Aiuto, M. Patrizia Stoppelli, and Marco Salvatore.
- 5455 **The Role of Platelet-derived Growth Factor Production by Tumor-associated Macrophages in Tumor Stroma Formation in Lung Cancer.** Jean-Michel Vignaud, Béatrice Marie, Nathalie Klein, François Plénat, Michael Pech, Jacques Borrelly, Nadine Martinet, Adrien Duprez, and Yves Martinet.
- 5464 **Immunophenotyping and Metastatic Localization of Breast Cancer.** J. C. Gioanni, C. Mazeau, E. Zanghellini, F. Hecht, J. Gugenheim, F. Crafa, C. Granon, M. Namer, F. Ettore, and M. Schneider.
- 5467 **Effect of Tissue Inhibitor of the Matrix Metalloproteinases-2 Expression on the Growth and Spontaneous Metastasis of a Human Melanoma Cell Line.** Anthony M. P. Montgomery, Barbara M. Mueller, Ralph A. Reisfeld, Shirley M. Taylor, and Yves A. DeClerck.
- 5474 **Androgen Receptor Activation in Prostatic Tumor Cell Lines by Insulin-like Growth Factor-I, Keratinocyte Growth Factor, and Epidermal Growth Factor.** Zoran Culig, Alfred Hobisch, Marcus V. Cronauer, Christian Radmayr, Jan Trapman, Anton Hittmair, Georg Bartsch, and Helmut Klocker.
- 5479 **Modulation by Retinoic Acid (RA) of Squamous Cell Differentiation, Cellular RA-binding Proteins, and Nuclear RA Receptors in Human Head and Neck Squamous Cell Carcinoma Cell Lines.** Chang-Ping Zou, John L. Clifford, Xiao-Chun Xu, Peter G. Sacks, Pierre Chambon, Waun K. Hong, and Reuben Lotan.
- 5488 **E-Cadherin Expression Determines the Mode of Replacement of Normal Urothelium by Human Bladder Carcinoma Cells.** Johanna M. J. Rebel, Cornelia D. E. M. Thijssen, Marcel Vermeij, Annie Delouvé, Ellen C. Zwarthoff, and Theodorus H. Van der Kwast.

Molecular Biology and Genetics

- 5430 **State of the p53 Gene in Hepatocellular Carcinomas of Ground Squirrels and Woodchucks with Past and Ongoing Infection with Hepadnaviruses.** Marianne B. Rivkina, John M. Cullen, William S. Robinson, and Patricia L. Marion.
- 5493 **Risk Assessment in Environmental Carcinogenesis: An American Association for Cancer Research Special Conference in Cancer Research Cosponsored by the Environmental Mutagen Society.** Bernard Strauss, Philip Hanawalt, and James Swenberg.

Meeting Report

5497 Announcements

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

5500 Author Index

**AACR forms available
in the back of this issue:**

**1995 Employment Register Forms
and Instructions**

**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**

Cancer Research

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

54 (20)

Cancer Res 1994;54:5251-5499.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/54/20.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/54/20.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.