



CONTENTS

Special Lecture

- 5533 **Beyond DNA Cross-Linking: History and Prospects of DNA-targeted Cancer Treatment—Fifteenth Bruce F. Cain Memorial Award Lecture.** Kurt W. Kohn.

Review

- 5547 **Prostate Cancer Prevention: Investigational Approaches and Opportunities.** Judith E. Karp, Andrew Chiarodo, Otis Brawley, and Gary J. Kelloff.

Advances in Brief

- 5557 **Altered p16^{INK4} and Retinoblastoma Protein Status in Non-Small Cell Lung Cancer: Potential Synergistic Effect with Altered p53 Protein on Proliferative Activity.** Ichiro Kinoshita, Hirotohi Dosaka-Akita, Takayuki Mishina, Kenji Akie, Motoi Nishi, Hiromitsu Hiroumi, Fumihiko Hommura, and Yoshikazu Kawakami.
- 5563 **Mutagenic DNA Base Modifications Are Correlated with Lesions in Nonneoplastic Hepatic Tissue of the English Sole Carcinogenesis Model.** Donald C. Malins, Nayak L. Polissar, Michael M. Garner, and Sandra J. Gunselman.
- 5566 **Chemoprevention of Mammary Carcinoma by LGD1069 (Targretin): An RXR-selective Ligand.** Marco M. Gottardis, Eric D. Bischoff, Michael A. Shirley, Muriel A. Wagoner, William W. Lamph, and Richard A. Heyman.
- 5571 **Resistance of the Human O⁶-Alkylguanine-DNA Alkyltransferase Containing Arginine at Codon 160 to Inactivation by O⁶-Benzylguanine.** Suvarchala Edara, Sreenivas Kanugula, Karina Goodtzova, and Anthony E. Pegg.
- 5576 **Mutations in the Arginine-rich Protein Gene, in Lung, Breast, and Prostate Cancers, and in Squamous Cell Carcinoma of the Head and Neck.** Ravi Shridhar, Viji Shridhar, Sylvie Rivard, Jill M. Siegfried, Helene Pietraszkiewicz, John Ensley, Robert Pauley, David Grignon, Wael Sakr, Orlando J. Miller, and David I. Smith.
- 5579 **Molecular Analysis of the FHIT Gene at 3p14.2 in Lung Cancer Cell Lines.** Kiyoshi Yanagisawa, Masashi Kondo, Hirota Osada, Kosaku Uchida, Kenzo Takagi, Akira Masuda, Toshitada Takahashi, and Takashi Takahashi.
- 5583 **Somatic *in Vivo* Alterations of the JVI8-1 Gene at 18q21 in Human Lung Cancers.** Kosaku Uchida, Masaaki Nagatake, Hirota Osada, Yasushi Yatabe, Masashi Kondo, Tetsuya Mitsudomi, Akira Masuda, Toshitada Takahashi, and Takashi Takahashi.
- 5586 **Definition of a Commonly Deleted Region in Ovarian Cancers to a 300-kb Segment of Chromosome 6q27.** Susumu Saito, Syuya Sirahama, Mieko Matsushima, Mituaki Suzuki, Satoru Sagae, Ryuichi Kudo, Junko Saito, Kiichiro Noda, and Yusuke Nakamura.
- 5590 **Mild Temperature Hyperthermia Combined with Carbogen Breathing Increases Tumor Partial Pressure of Oxygen (pO₂) and Radiosensitivity.** Robert J. Griffin, Kaoru Okajima, Bennett Barrios, and Chang W. Song.
- 5594 **Apoptosis Resistance Increases with Metastatic Potential in Cells of the Human LNCaP Prostate Carcinoma Line.** David J. McConkey, Graham Greene, and Curtis A. Pettaway.

- 5600 **Telomerase Activity in Head and Neck Squamous Cell Carcinoma and Adjacent Tissues.** Li Mao, Adel K. El-Naggar, You-Hong Fan, Jin Soo Lee, Scott M. Lippman, Scott Kayser, Reuben Lotan, and Waun Ki Hong.
- 5605 **Deletion Map of Chromosome 16q in Ductal Carcinoma *in Situ* of the Breast: Refining a Putative Tumor Suppressor Gene Region.** Taiping Chen, Aysegul Sahin, and C. Marcelo Aldaz.
- 5610 **Rapid Proliferation of B Cells from Adenoids in Response to Epstein-Barr Virus Infection.** Reinhard Zeidler, Petra Meissner, Günther Eissner, Sabine Lazis, and Wolfgang Hammerschmidt.

Regular Articles

Carcinogenesis

- 5615 **Glial Cell-specific Differences in Repair of O⁶-Methylguanine.** Susan P. LeDoux, Betty A. Williams, B. Scott Hollensworth, Chuen-cheh Shen, Jürgen Thomale, Manfred F. Rajewsky, Thomas P. Brent, and Glenn L. Wilson.
- 5620 **A Transforming Growth Factor β Type II Receptor Gene Mutation Common in Sporadic Cecum Cancer with Microsatellite Instability.** Goichi Togo, Nobuo Toda, Fumihiko Kanai, Naoya Kato, Yasushi Shiratori, Kiyozo Kishi, Fumio Imazeki, Masatoshi Makuuchi, and Masao Omata.

Experimental Therapeutics

- 5624 **Bis(7-amino-4-azaheptyl)dimethylsilane and Bis(7-ethylamino-4-azaheptyl)dimethylsilane: Inhibition of Tumor Cell Growth *in Vitro* and *in Vivo*.** Nikolaus Seiler, Jean-Guy Delcros, Michel Vaultier, Nathalie Le Roch, René Havouis, Fabienne Douaud, and Jacques-Philippe Moulinoux.
- 5631 **Preclinical Development of a Recombinant Toxin Containing Circularly Permuted Interleukin 4 and Truncated *Pseudomonas* Exotoxin for Therapy of Malignant Astrocytoma.** Raj K. Puri, Dave S. Hoon, Pamela Leland, Phil Snoy, Robert W. Rand, Ira Pastan, and Robert J. Kreitman.
- 5638 **Transcriptional Targeting of Recombinant Adenoviruses to Human and Murine Melanoma Cells.** William M. Siders, Patrick J. Halloran, and Robert G. Fenton.
- 5647 **The Role of Host Lymphoid Populations in the Response of Mouse EMT6 Tumor to Photodynamic Therapy.** Mladen Korbelik, Gorazd Krosil, Jana Krosil, and Graeme J. Dougherty.
- 5653 **Methylthioadenosine Phosphorylase cDNA Transfection Alters Sensitivity to Depletion of Purine and Methionine in A549 Lung Cancer Cells.** Hiroki Hori, Phuoc Tran, Carlos J. Carrera, Yasuko Hori, Michael D. Rosenbach, Dennis A. Carson, and Tsutomu Nobori.
- 5659 **Transgenic Mice Expressing the *Sh ble* Bleomycin Resistance Gene Are Protected against Bleomycin-induced Pulmonary Fibrosis.** Jérôme Weinbach, Anne Camus, Jacqueline Barra, Patrick Dumont, Monique Julian, Suzy Cros, Charles Babinet, and Gérard Tiraby.
- 5666 **Development of a Human Monoclonal Antibody to Ganglioside G_{M2} with Potential for Cancer Treatment.** Yumiko Nishinaka, Mepur H. Ravindranath, and Reiko F. Irie.

Immunology

- 5672 Retroviral Transduction of Human Dendritic Cells with a Tumor-associated Antigen Gene.** Mark E. Reeves, Richard E. Royal, John S. Lam, Steven A. Rosenberg, and Patrick Hwu.

Molecular Biology and Genetics

- 5678 Expression of Membrane-type Matrix Metalloproteinase 1 (MT1-MMP) in Tumor Cells Enhances Pulmonary Metastasis in an Experimental Metastasis Assay.** Yoshio Tsunozuka, Hiroaki Kinoh, Takahisa Takino, Yoh Watanabe, Yasunori Okada, Akira Shinagawa, Hiroshi Sato, and Motoharu Seiki.
- 5684 Inhibition of Angiogenesis in Human Glioblastomas by Chromosome 10 Induction of Thrombospondin-1.** Stephanie C. Hsu, Olga V. Volpert, Peter A. Steck, Tom Mikkelsen, Peter J. Polverini, Sambasiva Rao, Pauline Chou, and Noël P. Bouck.
- 5692 Mitochondrial Genome Damage Associated with Cigarette Smoking.** Scott W. Ballinger, T. Glen Bouder, Gerald S. Davis, Stephen A. Judice, Janice A. Nicklas, and Richard J. Albertini.
- 5698 Hypomethylation of L1 LINE Sequences Prevailing in Human Urothelial Carcinoma.** Bettina Jürgens, Bernd J. Schmitz-Dräger, and Wolfgang A. Schulz.
- 5704 Independent Regulation of Invasion and Anchorage-independent Growth by Different Autophosphorylation Sites of the Macrophage Colony-stimulating Factor 1 Receptor.** Eva Sapi, Maryann B. Flick, Sofya Rodov, Maureen Gilmore-Hebert, Marianne Kelley, Sara Rockwell, and Barry M. Kacinski.
- 5713 Orthotopic Xenografts of Human Pancreatic Carcinomas Acquire Genetic Aberrations during Dissemination in Nude Mice.** Germán Reyes, Alberto Villanueva, Carmen García, Francisco J. Sancho, Jaime Piulats, Fèlix Llufís, and Gabriel Capellá.
- 5720 Detection of Telomerase Activity in Oral Rinses from Head and Neck Squamous Cell Carcinoma Patients.** Joseph Califano, Steven A. Ahrendt, Glenn Meininger, William H. Westra, Wayne M. Koch, and David Sidransky.

- 5723 Reduced Expression of the Cyclin-dependent Kinase Inhibitor Gene *p57^{KIP2}* in Wilms' Tumor.** Jeffrey S. Thompson, Kimberly J. Reese, Michael R. DeBaun, Elizabeth J. Perlman, and Andrew P. Feinberg.

- 5728 Identification of Novel Germline *hMLH1* Mutations Including a 22 kb Alu-mediated Deletion in Patients with Familial Colorectal Cancer.** Jacques L. Mauillon, Pierre Michel, Jean-Marc Limacher, Jean-Baptiste Latouche, Pierre Dechelotte, Françoise Charbonnier, Cosette Martin, Viviane Moreau, Josette Metayer, Bernard Paillot, and Thierry Frebourg.

Tumor Biology

- 5734 Bcl-x_s Enhances Adenoviral Vector-induced Apoptosis in Neuroblastoma Cells.** Mukund G. Dole, Michael F. Clarke, Peter Holman, Mary Benedict, Jingyi Lu, Rama Jasty, Peter Eipers, Craig B. Thompson, Christopher Rode, Craig Bloch, Gabriel Nuñez, and Valerie P. Castle.
- 5741 Change in Ascorbate Radical Production in an Irradiated Experimental Tumor with Increased Tumor Size.** Hiroyoshi Isoda, Kiyoshi Akagi, Takashi Murata, Yoshizumi Aoki, Shigeki Ikeda, Yoshimasa Tanaka, Takeshi Kihara, and Masato Ikeda.
- 5745 A Reaction-Diffusion Model of Cancer Invasion.** Robert A. Gatenby and Edward T. Gawlinski.
- 5754 Genetic Instability Induced by the Tumor Microenvironment.** Toni Y. Reynolds, Sara Rockwell, and Peter M. Glazer.
- 5758 Galanin, Neurotensin, and Phorbol Esters Rapidly Stimulate Activation of Mitogen-activated Protein Kinase in Small Cell Lung Cancer Cells.** Thomas Seufferlein and Enrique Rozengurt.
- 5765 Transfection with Human Thioredoxin Increases Cell Proliferation and a Dominant-negative Mutant Thioredoxin Reverses the Transformed Phenotype of Human Breast Cancer Cells.** Alfred Gallegos, John R. Gasdaska, Charles W. Taylor, Gillian D. Paine-Murrieta, Daniel Goodman, Pamela Y. Gasdaska, Margareta Berggren, Margaret M. Briehl, and Garth Powis.

5771 Announcements

Future Annual Meetings of the AACR
1997 Annual Meeting
Gertrude Elion Cancer Research Award
AACR Research Fellowships
AACR Special Conferences in Cancer
Research
Calendar of Events

5773 Correction

N. Ban *et al.*, 56: 3577-3582, 1996.

5774 Obituary: Ronald N. Buick. Ian Tannock.

5775 Acknowledgment to Reviewers

5785 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
88th 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)

56 (24)

Cancer Res 1996;56:5533-5784.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/56/24.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/56/24.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.