



## CONTENTS

### Advances in Brief

- 3223 **Suppression of Tumor Growth *in Vivo* by Local and Systemic 90K Level Increase.** Bahija Jallal, Jeff Powell, Joseph Zachwieja, Cord Brakebusch, Linda Germain, Jolanta Jacobs, Stefano Iacobelli, and Axel Ullrich.
- 3228 **Gelsolin: A Candidate for Suppressor of Human Bladder Cancer.** Motoyoshi Tanaka, Leonhard Müllauer, Yoshifumi Ogiso, Hisakazu Fujita, Shingo Moriya, Keiji Furuuchi, Tooru Harabayashi, Nobuo Shinohara, Tomohiko Koyanagi, and Noboru Kuzumaki.
- 3233 **Induction of Programmed Cell Death in Human Breast Cancer Cells by an Unsymmetrically Alkylated Polyamine Analogue.** Diane E. McCloskey, Robert A. Casero, Jr., Patrick M. Woster, and Nancy E. Davidson.
- 3237 **Complex Replication Error Causes *p53* Mutation in a Li-Fraumeni Family.** Eric A. Strauss, Matthew R. Hosler, Philip Herzog, Kevin Salhani, Ronald Louie, and Carolyn A. Felix.
- 3242 **Defective Induction of Stress-activated Protein Kinase Activity in Ataxia-Telangiectasia Cells Exposed to Ionizing Radiation.** Timothy D. Shafman, Ahamed Saleem, John Kyriakis, Ralph Weichselbaum, Surender Kharbanda, and Donald W. Kufe.
- 3246 **Novel Suppressor Loci on Chromosome 14q in Primary Bladder Cancer.** Wayne Yen-Hwa Chang, Paul Cairns, Mark P. Schoenberg, Thomas J. Polascik, and David Sidransky.
- 3250 **Cell Cycle Arrest and Inhibition of Tumor Cell Proliferation by the *p16<sup>INK4</sup>* Gene Mediated by an Adenovirus Vector.** Xiaomei Jin, Dao Nguyen, Wei-Wei Zhang, Athanassios P. Kyritsis, and Jack A. Roth.
- 3254 **Ectopic Expression of Carcinoembryonic Antigen by a Melanoma Cell Leads to Changes in the Transcription of Two Additional Cell Adhesion Molecules.** Thomas Grimm and Judith P. Johnson.
- 3258 **Telomerase Activity in Gastric Cancer.** Eiso Hiyama, Takashi Yokoyama, Naokuni Tatsumoto, Keiko Hiyama, Yuji Imamura, Yoshiaki Murakami, Takashi Kodama, Mieczyslaw A. Piatyszek, Jerry W. Shay, and Yuichiro Matsuura.
- 3263 **Expression of Membrane-Type Matrix Metalloproteinase in Human Gastric Carcinomas.** Hidehiro Nomura, Hiroshi Sato, Motoharu Seiki, Masayoshi Mai, and Yasunori Okada.
- 3267 **Functional Evidence that Cell Surface Galectin-3 Mediates Homotypic Cell Adhesion.** Hidenori Inohara and Avraham Raz.
- 3272 **Complex Regulation of Membrane-Type Matrix Metalloproteinase Expression and Matrix Metalloproteinase-2 Activation by Concanavalin A in MDA-MB-231 Human Breast Cancer Cells.** Ming Yu, Hiroshi Sato, Motoharu Seiki, and Erik W. Thompson.
- 3286 **Metabolic Characterization of Human Non-Hodgkin's Lymphomas *in Vivo* with the Use of Proton-decoupled Phosphorus Magnetic Resonance Spectroscopy.** William G. Negendank, Kristin A. Padavic-Shaller, Chun-Wei Li, Joseph Murphy-Boesch, Radka Stoyanova, Robert L. Krigel, Russell J. Schilder, Mitchell R. Smith, and Truman R. Brown.
- 3295 **The Farnesyl Protein Transferase Inhibitor BZA-5B Blocks Farnesylation of Nuclear Lamins and p21<sup>ras</sup> but Does Not Affect Their Function or Localization.** Marguerite B. Dalton, Kelley S. Fante, Heather A. Bechtold, Lucas DeMaio, Robert M. Evans, Alphonse Krystosek, and Michael Sinensky.

### Carcinogenesis

- 3305 **Pulmonary Expression of Glutathione S-Transferase M3 in Lung Cancer Patients: Association with *GSTM1* Polymorphism, Smoking, and Asbestos Exposure.** Sisko Anttila, Leena Luostarinen, Ari Hirvonen, Eivor Elovaara, Antti Karjalainen, Tuula Nurminen, John D. Hayes, Harri Vainio, and Brian Ketterer.
- 3310 **Latent Expression of *p53* Mutations and Radiation-induced Mammary Cancer.** Christy S. Selvanayagam, Claude M. Davis, Michael N. Cornforth, and Robert L. Ullrich.
- 3318 **Synergistic Hepatocarcinogenic Effect of Hepadnaviral Infection and Dietary Aflatoxin B<sub>1</sub> in Woodchucks.** P. Bannasch, N. Imani Khoshkhou, H. J. Hacker, S. Radaeva, M. Mrozek, U. Zillmann, A. Kopp-Schneider, U. Haberkorn, M. Elgas, T. Tolle, M. Roggendorf, and I. Toshkov.

### Endocrinology

- 3331 **Changes in Estrogen Receptor, Progesterone Receptor, and pS2 Expression in Tamoxifen-resistant Human Breast Cancer.** S. R. D. Johnston, G. Saccani-Jotti, I. E. Smith, J. Salter, J. Newby, M. Coppen, S. R. Ebbs, and M. Dowsett.

### Experimental Therapeutics

- 3339 **Bystander Killing of Melanoma Cells Using the Human Tyrosinase Promoter to Express the *Escherichia coli* Purine Nucleoside Phosphorylase Gene.** Brian W. Hughes, Alan H. Wells, Zsuzsa Bebok, Vijayakrishna K. Gadi, Robert I. Garver, Jr., William B. Parker, and Eric J. Sorscher.
- 3346 **Effect of High-Intensity Focused Ultrasound on Human Prostate Cancer *in Vivo*.** Stephan Madersbacher, Markus Pedevilla, Lorri Vingers, Martin Susani, and Michael Marberger.
- 3352 **2-Amino-6-methoxypurine Arabinoside: An Agent for T-Cell Malignancies.** Catherine U. Lambe, Devron R. Averett, Melanie T. Paff, John E. Reardon, Joan G. Wilson, and Thomas A. Krenitsky.
- 3357 **Increased Antitumor Activity of a Circularly Permuted Interleukin 4-Toxin in Mice with Interleukin 4 Receptor-bearing Human Carcinoma.** Robert J. Kreitman, Raj K. Puri, and Ira Pastan.

### Immunology

- 3364 **Immune Sera and Monoclonal Antibodies Define Two Configurations for the Sialyl Tn Tumor Antigen.** Shengle Zhang, Linda A. Walberg, Shunichiro Ogata, Steven H. Itzkowitz, R. Rao Koganty, Mark Reddish, Sham S. Gandhi, B. Michael Longenecker, Kenneth O. Lloyd, and Philip O. Livingston.

### Regular Articles

#### Biochemistry and Biophysics

- 3278 **High  $K_m$  Glucose-phosphorylating (Glucokinase) Activities in a Range of Tumor Cell Lines and Inhibition of Rates of Tumor Growth by the Specific Enzyme Inhibitor Mannoheptulose.** Mary Board, Alison Colquhoun, and Eric A. Newsholme.

- 3369 **In Vivo Antitumor Activity of T Cells Redirected with Chimeric Antibody/T-Cell Receptor Genes.** P. Hwu, J. C. Yang, R. Cowherd, J. Treisman, G. E. Shafer, Z. Eshhar, and S. A. Rosenberg.
- 3374 **Overexpression of the T-Cell Receptor  $\beta$ -Chain Variable Region TCRBV14 in HLA-A2-matched Primary Human Melanomas.** Stefania Salvi, Fabio Segalla, Stefania Rao, Flavio Arienti, Massimo Sartori, Giorgio Bratina, Enrico Caronni, Andrea Anichini, Claudio Clemente, Giorgio Parmiani, and Marialuisa Sensi.
- 3417 **Detection of Cancer Micrometastases in Lymph Nodes by Reverse Transcriptase-Polymerase Chain Reaction.** Masaki Mori, Koshi Mimori, Hiroshi Inoue, Graham F. Barnard, Koichi Tsuji, Shigeru Nanbara, Hiroaki Ueo, and Tsuyoshi Akiyoshi.
- 3421 **Mutation Frequency of the *p16/CDKN2* Gene in Primary Cancers in the Upper Digestive Tract.** Hiroyasu Igaki, Hiroki Sasaki, Yuji Tachimori, Hoichi Kato, Hiroshi Watanabe, Taizo Kimura, Yukio Harada, Takashi Sugimura, and Masaaki Terada.

### Molecular Biology and Genetics

- 3380 **Chromosome Microdissection Identifies Cryptic Sites of DNA Sequence Amplification in Human Ovarian Carcinoma.** Xin-Yuan Guan, Colyn B. Cargile, Sarah L. Anzick, Floyd H. Thompson, Paul S. Meltzer, Michael L. Bittner, Raymond Taetle, John R. McGill, and Jeffrey M. Trent.
- 3386 **Maintenance of Normal Imprinting of *H19* and *IGF2* Genes in Neuroblastoma.** Makio Wada, Robert C. Seeger, Hideaki Mizoguchi, and H. Phillip Koefler.
- 3389 **Suppression of Malignant Phenotype in a Human Prostate Cancer Cell Line by Fragments of Normal Chromosomal Region 17q.** Yoshinori S. Murakami, Arthur R. Brothman, Robin J. Leach, and Raymond L. White.
- 3395 **Identification of Multiple Breast Cancers of Multicentric Origin by Histological Observations and Distribution of Allele Loss on Chromosome 16q.** Hitoshi Tsuda and Setsuo Hirohashi.
- 3399 **Allelotyping of Ductal Carcinoma *in Situ* of the Breast: Deletion of Loci on 8p, 13q, 16q, 17p and 17q.** Diane M. Radford, Keri L. Fair, Nancy J. Phillips, Jon H. Ritter, Todd Steinbrueck, Matthew S. Holt, and Helen Donis-Keller.
- 3406 **Base Transitions at CpG Dinucleotides in the *p53* Gene Are Common in Esophageal Adenocarcinoma.** Catherine M. Gleeson, James M. Sloan, James A. McGuigan, Andrew J. Ritchie, and S. E. Hilary Russell.
- 3412 **A New Complementation Group of Mitomycin C-hypersensitive Chinese Hamster Cell Mutants That Closely Resembles the Phenotype of Fanconi Anemia Cells.** Pieter Telleman, Wilhelmina J. I. Overkamp, Noucha van Wessel, Kazimierz Studzian, Laura Wetselaar, Adayapalam T. Natarajan, and Małgorzata Z. Zdzienicka.

### Tumor Biology

- 3424 **Increased Levels of Glycoproteins Containing Mannose 6-Phosphate in Human Breast Carcinomas.** David E. Sleat, Tsuey-Ling Chen, Karel Raska, Jr., and Peter Lobel.
- 3431 **Effects of Stem Cell Factor on the Growth and Radiation Survival of Tumor Cells.** Chaoxiang Shui, Waqqar B. Khan, Bryan R. Leigh, Anne M. Turner, Richard B. Wilder, and Susan J. Knox.
- 3438 **Autocrine Growth of Transitional Cell Carcinoma of the Bladder Induced by Granulocyte-Colony Stimulating Factor.** Masaaki Tachibana, Ayako Miyakawa, Hiroshi Tazaki, Kayoko Nakamura, Atsushi Kubo, Jun-ichi Hata, Tatsunari Nishi, and Yasuhiro Amano.
- 3444 **The *rck/p54* Candidate Proto-oncogene Product Is a 54-Kilodalton D-E-A-D Box Protein Differentially Expressed in Human and Mouse Tissues.** Yukihiro Akao, Osamu Marukawa, Hiroshi Morikawa, Keiichi Nakao, Mikako Kamei, Takahisa Hachiya, and Yoshihide Tsujimoto.
- 3450 **Antitumor Effectiveness of Electrochemotherapy with *cis*-Diamminedichloroplatinum(II) in Mice.** Gregor Serša, Maja Čemažar, and Damijan Miklavčič.
- 3456 **Identification and Characterization of Human  $\beta 2$ -Chimaerin: Association with Malignant Transformation in Astrocytoma.** Shixing Yuan, David W. Miller, Gene H. Barnett, Joseph F. Hahn, and Bryan R. G. Williams.

### Meeting Report

- 3462 **Sixth Annual Pezcoller Symposium: Normal and Malignant Hematopoiesis—New Advances.** Enrico Mihich and Donald Metcalf.

### 3467 Announcements

Future Annual Meetings of the AACR  
Workshop on Methods in Clinical Cancer Research  
AACR Special Conferences in Cancer Research  
Recent Deaths  
Calendar of Events

### 3470 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**

# Cancer Research

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

## 55 (15)

*Cancer Res* 1995;55:3223-3469.

**Updated version** Access the most recent version of this article at:  
<http://cancerres.aacrjournals.org/content/55/15.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](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link <http://cancerres.aacrjournals.org/content/55/15.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.