



## CONTENTS

### Advances in Brief

- 2487 **Effects of Estrogen on Apoptotic Pathways in Human Breast Cancer Cell Line MCF-7.** Thomas T. Y. Wang and James M. Phang.
- 2490 **Expression of Manganese Superoxide Dismutase Reduces Tumor Control Radiation Dose: Gene-Radiotherapy.** Muneyasu Urano, Masahiro Kuroda, Regina Reynolds, Terry D. Oberley, and Daret K. St. Clair.
- 2494 **A Defined Region of Loss of Heterozygosity at 11q23 in Cutaneous Malignant Melanoma.** Rudolf A. Herbst, Amy Larson, Jürgen Weiss, Webster K. Cavenee, Garret M. Hampton, and Karen C. Arden.
- 2497 **Molecular Characterization of 12q14–15 Rearrangements in Three Pulmonary Chondroid Hamartomas.** Bernd Kazmierczak, Sylke Wanschura, Jens Rosigkeit, Kerstin Meyer-Bolte, Klaus Uschinsky, Rolf Haupt, Eric F. P. M. Schoenmakers, Sabine Bartnitzke, Wim J. M. Van de Ven, and Jörn Bullerdiek.
- 2500 **p21<sup>CIP1</sup> Is Not Required for the Early G<sub>2</sub> Checkpoint Response to Ionizing Radiation.** Eleni N. Levedakou, William K. Kaufmann, David A. Alcorta, Denise A. Galloway, and Richard S. Paules.
- 2503 **Mutational Effects on the p16<sup>INK4a</sup> Tumor Suppressor Protein.** Rong Yang, Adrian F. Gombart, Manuel Serrano, and H. Phillip Koeffler.
- 2507 **Overexpression of Bcl-x<sub>s</sub> Sensitizes MCF-7 Cells to Chemotherapy-induced Apoptosis.** Venil N. Sumantran, Mark W. Ealovega, Gabriel Nuñez, Michael F. Clarke, and Max S. Wicha.
- 2511 **Allele-specific Mutations Involved in the Pathogenesis of Endemic Gallbladder Carcinoma in Chile.** Ignacio I. Wistuba, Kenji Sugio, Jaclyn Hung, Yosuke Kishimoto, Arvind K. Virmani, Ivan Roa, Jorge Albores-Saavedra, and Adi F. Gazdar.
- 2516 **Selective Cell Culture of Primary Breast Carcinoma.** Shanaz H. Dairkee, Guoren Deng, Martha R. Stampfer, Frederic M. Waldman, and Helene S. Smith.
- 2520 **Fate of Melanoma Cells Entering the Microcirculation: Over 80% Survive and Extravasate.** Sahadia Koop, Ian C. MacDonald, Keith Luzzi, Eric E. Schmidt, Vincent L. Morris, Marsha Grattan, Rama Khokha, Ann F. Chambers, and Alan C. Groom.
- 2524 **Cytokine-producing Mammary Carcinomas in Transgenic Rats Carrying the pX Gene of Human T-Lymphotropic Virus Type I.** Satoshi Yamada, Hitoshi Ikeda, Hidetoshi Yamazaki, Hiroyuki Shikishima, Kazunori Kikuchi, Akemi Wakisaka, Noriyuki Kasai, Kunitada Shimotohno, and Takashi Yoshiki.
- 2528 **Protein B61 as a New Growth Factor: Expression of B61 and Up-Regulation of Its Receptor Epithelial Cell Kinase during Melanoma Progression.** David J. Easty, Brenda A. Guthrie, Kavita Maung, Christine J. Farr, Richard A. Lindberg, Robert J. Toso, Meenhard Herlyn, and Dorothy C. Bennett.
- 2533 **Telomerase Activity Associated with Acquisition of Malignancy in Human Colorectal Cancer.** Corinne Chadeneau, Kazy Hay, Hal W. Hirte, Steven Gallinger, and Silvia Bacchetti.
- 2537 **Differential Expression of Elafin in Human Normal Mammary Epithelial Cells and Carcinomas Is Regulated at the Transcriptional Level.** Ming Zhang, Zhiqiang Zou, Nicolai Maass, and Ruth Sager.

### Regular Articles

#### Biochemistry and Biophysics

- 2542 **An Alternatively Spliced Form of NQO<sub>1</sub> (DT-Diaphorase) Messenger RNA Lacking the Putative Quinone Substrate Binding Site Is Present in Human Normal and Tumor Tissues.** Pamela Y. Gasdaska, Hugh Fisher, and Garth Powis.
- 2548 **Activation of Progelatinase B (MMP-9) by Gelatinase A (MMP-2).** Rafael Fridman, Marta Toth, Daniel Peña, and Shahriar Mobashery.
- 2556 **Expression of Prostaglandin G/H Synthase-1 and -2 Protein in Human Colon Cancer.** Stacia L. Kargman, Gary P. O'Neill, Philip J. Vickers, Jilly F. Evans, Joseph A. Mancini, and Serge Jothy.

#### Carcinogenesis

- 2560 **Multiple Genetic Alterations in Hamster Pancreatic Ductal Adenocarcinomas.** Kuo-Wei Chang, Sergio Laconi, Kathy A. Mangold, Susan Hubchak, and Dante G. Scarpelli.
- 2569 **A Mutator Phenotype Characterizes One of Two Complementation Groups in Human Cells Tolerant to Methylation Damage.** Gabriele Aquilina, Patricia Hess, Silvia Fiumicino, Sabrina Ceccotti, and Margherita Bignami.
- 2576 **Bcl-x<sub>L</sub> Is Expressed in Neuroblastoma Cells and Modulates Chemotherapy-induced Apoptosis.** Mukund G. Dole, Rama Jasty, Mark J. Cooper, Craig B. Thompson, Gabriel Nuñez, and Valerie P. Castle.

#### Endocrinology

- 2583 **An Estrogen-Independent MCF-7 Breast Cancer Cell Line Which Contains a Novel 80-Kilodalton Estrogen Receptor-related Protein.** John J. Pink, Shun-Yuan Jiang, Michael Fritsch, and V. Craig Jordan.
- 2591 **Prolactin Synthesis and Secretion by Human Breast Cancer Cells.** Erika Ginsburg and Barbara K. Vonderhaar.
- 2596 **Modulation of Transforming Growth Factor  $\beta$ 1 Effects on Prostate Cancer Cell Proliferation by Growth Factors and Extracellular Matrix.** Diane M. Morton and Evelyn R. Barrack.

#### Experimental Therapeutics

- 2603 **Antimelanoma Effect of 4-S-Cysteaminylcatechol, an Activated Form of 4-S-Cysteaminylphenol.** Shigeki Inoue, Katsutoshi Hasegawa, Shosuke Ito, Hiroyuki Ozeki, Francisco Solano, Celia Jiménez-Cervantes, Kazumasa Wakamatsu, and Keisuke Fujita.
- 2608 **Retrovirus-mediated Expression of a DNA Repair Protein in Bone Marrow Protects Hematopoietic Cells from Nitrosourea-induced Toxicity *in Vitro* and *in Vivo*.** Thomas Moritz, William Mackay, Brian J. Glassner, David A. Williams, and Leona Samson.
- 2615 **Inhibition of the Growth of Various Human and Mouse Tumor Cells by 1,15-Bis(ethylamino)-4,8,12-triazapentadecane.** Kazuei Igarashi, Kunihiko Koga, Yong He, Tomomi Shimogori, Hisao Ekimoto, Keiko Kashiwagi, and Akira Shirahata.

- 2620 **Uptake, Localization, and Photodynamic Effect of *meso*-Tetra-(hydroxyphenyl)porphine and Its Corresponding Chlorin in Normal and Tumor Tissues of Mice Bearing Mammary Carcinoma.** Qian Peng, Johan Moan, Li-Wei Ma, and Jahn M. Nesland.
- 2627 **Eradication of Large Human B Cell Tumors in Nude Mice with Unconjugated CD20 Monoclonal Antibodies and Interleukin 2.** Erik Hooijberg, Johan J. Sein, Paul C. M. van den Berk, Augustinus A. M. Hart, Martin A. van der Valk, W. Martin Kast, Cornelis J. M. Melief, and Annemarie Hekman.
- 2660 **Loss of Heterozygosity for Chromosome 11 in Primary Human Breast Tumors Is Associated with Poor Survival after Metastasis.** R. Winqvist, G. M. Hampton, A. Mannermaa, G. Blanco, M. Alavaikko, H. Kiviniemi, P. J. Taskinen, G. A. Evans, F. A. Wright, I. Newsham, and W. K. Cavenee.
- 2665 **Mutations of the *K-ras* and *p53* Genes in Gastric Adenocarcinomas from a High-Incidence Region around Florence, Italy.** Tadashi Hongyo, Gregory S. Buzard, Domenico Palli, Christopher M. Weghorst, Andrea Amorosi, Monica Galli, Neil E. Caporaso, Joseph F. Fraumeni, Jr., and Jerry M. Rice.

### Immunology

- 2635 **Immunological Responses in Human Papillomavirus 16 E6/E7-transgenic Mice to E7 Protein Correlate with the Presence of Skin Disease.** I. H. Frazer, D. M. Leippe, L. A. Dunn, A. Liem, R. W. Tindle, G. J. P. Fernando, W. C. Phelps, and P. F. Lambert.

### Molecular Biology and Genetics

- 2640 **Prostate-specific Antigen Messenger RNA Is Expressed in Non-Prostate Cells: Implications for Detection of Micrometastases.** Mitchell R. Smith, Sandra Biggar, and Maha Hussain.
- 2645 **Suppressive Role of the Metastasis-related *nm23-H1* Gene in Human Ovarian Carcinomas: Association of High Messenger RNA Expression with Lack of Lymph Node Metastasis.** Alessandra Viel, Lara Dall'Agnese, Vincenzo Canzonieri, Francesco Sopracordevole, Eugenia Capozzi, Antonino Carbone, Maria Caterina Visentin, and Mauro Boiocchi.
- 2651 **Identification of an Enhancer Responsible for Tumor Marker Gene Expression by Means of Transgenic Rats.** Toshiya Suzuki, Masayoshi Imagawa, Masumi Hirabayashi, Atsushi Yuki, Koji Hisatake, Kimie Nomura, Tomoyuki Kitagawa, and Masami Muramatsu.
- 2656 **Sequential Loss of Heterozygosity at Microsatellite Motifs in Pre-invasive and Invasive Head and Neck Squamous Carcinoma.** Adel K. El-Naggar, Kenneth Hurr, John G. Batsakis, Mario A. Luna, Helmuth Goeppfert, and Vicki Huff.

### Tumor Biology

- 2673 **Identification of a Monoclonal Antibody, TV-1, Directed against the Basement Membrane of Tumor Vessels, and Its Use to Enhance the Delivery of Macromolecules to Tumors after Conjugation with Interleukin 2.** Alan L. Epstein, Leslie A. Khawli, Jason L. Hornick, and Clive R. Taylor.
- 2681 **Mucin Gene Expression in Normal, Preneoplastic, and Neoplastic Human Gastric Epithelium.** Samuel B. Ho, Laurie L. Shekels, Neil W. Toribara, Young S. Kim, Carolyn Lyftogt, David L. Cherwitz, and Gloria A. Niehans.
- 2691 **Expression of Peripheral-Type Benzodiazepine Receptor and Diazepam Binding Inhibitor in Human Astrocytomas: Relationship to Cell Proliferation.** Helena Miettinen, Juha Kononen, Hannu Haapasalo, Pauli Helén, Pauli Sallinen, Tero Harjuntausta, Heikki Helin, and Hannu Alho.
- 2696 **Glutathione S-Transferase  $\pi$  in Colorectal Tumors Is Predictive for Overall Survival.** Theo P. J. Mulder, Hein W. Verspaget, Cornelis F. M. Sier, Hennie M. J. Roelofs, Sjam Ganesh, Gerrit Griffioen, and Wilbert H. M. Peters.
- 2703 **Expression of Platelet-derived Growth Factor B-Chain and the Platelet-derived Growth Factor Receptor  $\beta$  Subunit in Human Breast Tissue and Breast Carcinoma.** Marc D. Coltrera, Jian Wang, Peggy L. Porter, and Allen M. Gown.

### 2709 Announcements

Future Annual Meetings of the AACR  
 Call for Nominations for AACR Awards  
 Workshop on Methods in Clinical Cancer Research  
 AACR Special Conferences in Cancer Research  
 Calendar of Events

### 2711 Erratum

I. P. Pogribny *et al.*, 55: 1894–1901, 1995.

### 2712 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 (12)

*Cancer Res* 1995;55:2487-2711.

**Updated version** Access the most recent version of this article at:  
<http://cancerres.aacrjournals.org/content/55/12.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/55/12.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.