



CONTENTS

Advances in Brief

- 321 **Activation of *p53* Gene Expression in Premalignant Lesions during Head and Neck Tumorigenesis.** Dong M. Shin, Jhingook Kim, Jae Y. Ro, Jason Hittelman, Jack A. Roth, Waun K. Hong, and Walter N. Hittelman.
- 327 **Inhibition of Human *O*⁶-Methylguanine-DNA Methyltransferase by 5-Methylcytosine.** S. Stephen Bentivegna and Edward Bresnick.
- 330 **Molecular Cloning and Characterization of Alternatively Spliced Transcripts of the Mouse Neurofibromatosis 2 Gene.** Tetsuo Hara, Albert B. Bianchi, Bernd R. Seizinger, and Nikolai Kley.
- 336 **Isolation and Identification of Fresh Tumor-derived Endothelial Cells from a Murine RIF-1 Fibrosarcoma.** Ruth A. Modzelewski, Paul Davies, Simon C. Watkins, Robert Auerbach, Ming-Jei Chang, and Candace S. Johnson.
- 340 **Evidence for the Existence of a Third Progesterone Receptor Protein in Human Breast Cancer Cell Line T47D.** Lisa L. Wei and Robyn Miner.
- 344 **Distinct Deletions of Chromosome 9p Associated with Melanoma versus Glioma, Lung Cancer, and Leukemia.** Aaron Coleman, Jane W. Fountain, Tsutomu Nobori, Olufunmilayo I. Olopade, Gavin Robertson, David E. Housman, and Tracy G. Lugo.
- 349 **Estrogen Receptor Mutations in Tamoxifen-resistant Breast Cancer.** Pratima S. Karnik, Sucheta Kulkarni, Xiao-Pu Liu, G. Thomas Budd, and Ronald M. Bukowski.
- 354 **Expression of the Neuroectodermal Intermediate Filament Nestin in Human Melanomas.** Vivi Ann Flørenes, Ruth Holm, Ola Myklebost, Urban Lendahl, and Øystein Fodstad.
- 357 **Overexpression of Multidrug Resistance-associated Protein (MRP) Increases Resistance to Natural Product Drugs.** Caroline E. Grant, Gunnar Valdimarsson, David R. Hipfner, Kurt C. Almquist, Susan P. C. Cole, and Roger G. Deeley.
- 362 **Percentage of Embryonal Carcinoma and of Vascular Invasion Predicts Pathological Stage in Clinical Stage I Nonseminomatous Testicular Cancer.** Judd W. Moul, William F. McCarthy, Eduardo B. Fernandez, and Isabell A. Sesterhenn.
- 365 **Fetal Isoform of Human Retinoic Acid Receptor β Expressed in Small Cell Lung Cancer Lines.** Benoit Houle, Manon Pelletier, Jiangping Wu, Cynthia Goodyer, and W. E. C. Bradley.
- 370 **Molecular Rearrangement of the *ALL-1* Gene in Acute Myeloid Leukemia without Cytogenetic Evidence of 11q23 Chromosomal Translocations.** Michael A. Caligiuri, Steven A. Schichman, Matthew P. Strout, Krzysztof Mrózek, Maria R. Baer, Stanley R. Frankel, Maurice Barcos, Geoffrey P. Herzig, Carlo M. Croce, and Clara D. Bloomfield.
- 374 **Ultraviolet Radiation Induces Phosphorylation of the Epidermal Growth Factor Receptor.** Ingrid Warmuth, Yoram Harth, Mary S. Matsui, Nianci Wang, and Vincent A. DeLeo.

- 377 **Messenger RNA Levels of Five Genes Located at Chromosome 11q13 in B-Cell Tumors with Chromosome Translocation t(11;14)(q13;q32).** Nobu Akiyama, Hiroyuki Tsuruta, Hiroki Sasaki, Hiromi Sakamoto, Masaaki Hamaguchi, Yoshihisa Ohmura, Masao Seto, Ryuzo Ueda, Hisamaru Hirai, Yoshio Yazaki, Takashi Sugimura, and Masaaki Terada.
- 380 **Cyclin E, a Potential Prognostic Marker for Breast Cancer.** Khandan Keyomarsi, Nuala O'Leary, Gyongyi Molnar, Emma Lees, Howard J. Fingert, and Arthur B. Pardee.

Regular Articles

Biochemistry and Biophysics

- 386 **Taxol Metabolism by Human Liver Microsomes: Identification of Cytochrome P450 Isozymes Involved in Its Biotransformation.** Thierry Cresteil, Bernard Monsarrat, Paul Alvinerie, Jean Marc Tréluyer, Isabel Vieira, and Michel Wright.

Carcinogenesis

- 393 **Transforming Growth Factor β -treated Normal Fibroblasts Eliminate Transformed Fibroblasts by Induction of Apoptosis.** J. M. Jürgensmeier, C. P. Schmitt, E. Viesel, P. Höfler, and G. Bauer.
- 399 **Abnormal Bone Marrow B-Cell Differentiation in Pre-B Lymphoma-prone SL/Kh Mice.** Keisei Okamoto, Yoshihiro Yamada, Masako S. Ogawa, Shinya Toyokuni, Yukari Nakakuki, Hidetoshi Ikeda, Osamu Yoshida, and Hiroshi Hiai.
- 403 **Genetic Predisposition to Pre-B Lymphomas in SL/Kh Strain Mice.** Yoshihiro Yamada, Hisanori Matsushiro, Masako S. Ogawa, Keisei Okamoto, Yukari Nakakuki, Shinya Toyokuni, Manabu Fukumoto, and Hiroshi Hiai.

Clinical Investigations

- 408 **Investigation of a New Pure Antiestrogen (ICI 182780) in Women with Primary Breast Cancer.** David J. DeFriend, Anthony Howell, Robert I. Nicholson, Elizabeth Anderson, Mitchell Dowsett, Robert E. Mansel, Roger W. Blamey, Nigel J. Bundred, John F. Robertson, Christobel Saunders, Michael Baum, Peter Walton, Frances Sutcliffe, and Alan E. Wakeling.
- 415 **Kinetics of the Immune Response and Regression of Metastatic Lesions following Development of Humoral Anti-High Molecular Weight-Melanoma Associated Antigen Immunity in Three Patients with Advanced Malignant Melanoma Immunized with Mouse Anti-idiotypic Monoclonal Antibody MK2-23.** A. Mittelman, Z. J. Chen, C. C. Liu, S. Hirai, and S. Ferrone.
- 422 **Potential Use of Soluble CD44 in Serum as Indicator of Tumor Burden and Metastasis in Patients with Gastric or Colon Cancer.** Ya-Jun Guo, Guangluo Liu, Xiaoning Wang, Dadi Jin, Mengchao Wu, Jing Ma, and Man-Sun Sy.

- 427 **Phase I and Pharmacological Study of the Novel Topoisomerase I Inhibitor 7-Ethyl-10-[4-(1-piperidino)-1-piperidino]carbonyloxy-camptothecin (CPT-11) Administered as a Ninety-Minute Infusion Every 3 Weeks.** Eric K. Rowinsky, Louise B. Grochow, David S. Ettinger, Susan E. Sartorius, Barbara G. Lubejko, Tian-Ling Chen, Michael K. Rock, and Ross C. Donehower.

Epidemiology

- 437 **DNA Repair Related to Multiple Skin Cancers and Drug Use.** Qingyi Wei, Genevieve M. Matanoski, Evan R. Farmer, Mohammad A. Hedayati, and Lawrence Grossman.

Experimental Therapeutics

- 441 **Effect of Tamoxifen on the Multidrug-resistant Phenotype in Human Breast Cancer Cells: Isobologram, Drug Accumulation, and M_r 170,000 Glycoprotein (gp170) Binding Studies.** Fabio Leonessa, Mary Jacobson, Bryan Boyle, Jeremy Lippman, Michael McGarvey, and Robert Clarke.
- 448 **The Herbal Medicine Sho-saiko-to Inhibits Proliferation of Cancer Cell Lines by Inducing Apoptosis and Arrest at the G_0/G_1 Phase.** Hirohisa Yano, Atsushi Mizoguchi, Kazunori Fukuda, Makoto Haramaki, Sachiko Ogasawara, Seiya Momosaki, and Masamichi Kojiro.
- 455 **Combinations of Stem Cell Factor with Other Hematopoietic Growth Factors Enhance Growth and Sensitivity to Cytosine Arabinoside of Blast Progenitors in Acute Myelogenous Leukemia.** Yuka Inatomi, Keisuke Toyama, Steven C. Clark, Koichi Shimizu, and Jun Miyauchi.
- 463 **Rapid Tumor Imaging by Active Background Reduction Using Biotin-bearing Liposomes and Avidin.** Izumi Ogihara-Umeda, Toru Sasaki, Hinako Toyama, Keiichi Oda, Michio Senda, and Hideo Nishigori.
- 468 **Potential of Radiation-induced Regrowth Delay in Murine Tumors by Fludarabine.** Vincent Grégoire, Nancy Hunter, Luka Milas, William A. Brock, William Plunkett, and Walter N. Hittelman.
- 475 **Combination versus Single Agent Therapy in Effecting Complete Therapeutic Response in Human Bladder Cancer: Analysis of Cisplatin and/or 5-Fluorouracil in an *in Vivo* Survival Model.** Thomas E. Keane, Jeffrey R. Gingrich, G. Rosner, Karen S. Webb, Susan H. Poulton, and Philip J. Walther.
- 482 **Activity of 3'-(3-Cyano-4-morpholinyl)-3'-deaminoadriamycin in Sensitive and Resistant L5178Y Lymphoblasts *in Vitro*.** Asher Begleiter, Marsha K. Leith, and James B. Johnston.
- 487 **Characterization of Resistance Mechanisms to *cis*-Diamminedichloroplatinum(II) in Three Sublines of the CC531 Colon Adenocarcinoma Cell Line *in Vitro*.** J. Oldenburg, A. C. Begg, M. J. H. van Vugt, M. Ruevekamp, J. H. Schornagel, H. M. Pinedo, and G. Los.

Molecular Biology and Genetics

- 494 **Negative Regulation of Histone H1 Kinase Expression by Mimosine, a Plant Amino Acid.** Sandy T. Feldman and Axel Schönthal.
- 499 **Loss of Heterozygosity and *p53* Gene Mutations in Breast Cancer.** Guoren Deng, Ling-Chun Chen, David R. Schott, Ann Thor, Vivek Bhargava, Britt-Marie Ljung, Karen Chew, and Helene S. Smith.
- 506 **Chimerization of Antitumor Antibodies via Homologous Recombination Conversion Vectors.** Susan Yarnold and H. Perry Fell.
- 513 **Allele Loss on Chromosome 16q24.2-pter Occurs Frequently in Breast Cancers Irrespective of Differences in Phenotype and Ex-**

tent of Spread. Hitoshi Tsuda, David F. Callen, Takashi Fukutomi, Yusuke Nakamura, and Setsuo Hirohashi.

- 518 **Preferential Expression of the Third Immunoglobulin-like Domain of *K-sam* Product Provides Keratinocyte Growth Factor-dependent Growth in Carcinoma Cell Lines.** Hideshi Ishii, Yutaka Hattori, Hiroshi Itoh, Tatsuya Kishi, Teruhiko Yoshida, Hiromi Sakamoto, Hakumei Oh, Sho Yoshida, Takashi Sugimura, and Masaaki Terada.
- 523 **MDA-MB-134 Breast Carcinoma Cells Overexpress Fibroblast Growth Factor (FGF) Receptors and Are Growth-inhibited by FGF Ligands.** Sandra W. McLeskey, Ivan Y. F. Ding, Marc E. Lippman, and Francis G. Kern.
- 531 **Allelotype of Human Bladder Cancer.** Margaret A. Knowles, Patricia A. Elder, Magali Williamson, J. Paul Cairns, Margaret E. Shaw, and Matthew G. Law.
- 539 **Elevation of Topoisomerase I Messenger RNA, Protein, and Catalytic Activity in Human Tumors: Demonstration of Tumor-type Specificity and Implications for Cancer Chemotherapy.** Intisar Husain, James L. Mohler, Hillard F. Seigler, and Jeffrey M. Besterman.
- 547 **Differential Expression of Heat Shock Proteins in Pancreatic Carcinoma.** Thomas M. Gress, Friederike Müller-Pillasch, Christoph Weber, Markus M. Lerch, Helmut Friess, Markus Büchler, Hans G. Beger, and Guido Adler.
- 552 **Analysis of the Tumor Suppressor Activity of the *K-rev-1* Gene in Human Tumor Cell Lines.** Kevin Y. Sato, Paul G. Polakis, Heinz Haubruck, Clare L. Fasching, Frank McCormick, and Eric J. Stanbridge.

Tumor Biology

- 560 **Cell Proliferation in Human Soft Tissue Tumors Correlates with Platelet-derived Growth Factor B Chain Expression: An Immunohistochemical and *in Situ* Hybridization Study.** Jian Wang, Marc D. Coltrera, and Allen M. Gown.
- 565 **Tumor Cell-derived 12(S)-Hydroxyeicosatetraenoic Acid Induces Microvascular Endothelial Cell Retraction.** Kenneth V. Honn, Dean G. Tang, Irma Grossi, Zofia M. Duniec, Jozsef Timar, Colette Renaud, Marie Leithauser, Ian Blair, Carl R. Johnson, Clement A. Diglio, Victoria A. Kimler, John D. Taylor, and Lawrence J. Marnett.
- 575 **Transforming Growth Factor β Production and Responsiveness in Normal Human Melanocytes and Melanoma Cells.** Ulrich Rodeck, Anna Bossler, Ullrich Graeven, Floyd E. Fox, Peter C. Nowell, Cornelius Knabbe, and Csaba Kari.
- 582 **The Involvement of "Tumor Suppressor" *p53* in Normal and Chronic Myelogenous Leukemia Hemopoiesis.** Sucai Bi, Francesco Lanza, and John M. Goldman.
- 587 **Vascularization of Carcinomas of the Esophagus and Its Correlation with Tumor Proliferation.** Rainer Porschen, Susanne Classen, Michael Piontek, and Franz Borchard.
- 592 **Inhibition by Interleukin 4 of Leukemia Inhibitory Factor-, Interleukin 6-, and Dexamethasone-induced Differentiation of Mouse Myeloid Leukemia Cells: Role of *c-myc* and *junB* Proto-oncogenes.** Takashi Kasukabe, Junko Okabe-Kado, Motoo Hozumi, and Yoshio Honma.

Meeting Report

- 598 **Crosstalk at La Bretesche.** Peter K. Vogt.

601 Announcements

New Schedule for Annual Meetings of
AACR Beginning in 1994
New Privileges and Responsibilities of
Corresponding Membership
Broadening of Associate Membership
Workshop on Histopathobiology of Cancer
Workshop on Molecular Biology in
Clinical Oncology
AACR Special Conferences in Cancer
Research
Calendar of Events

**Available in the back
of this issue:**

**Employment Register Forms
and Instructions**

**New Guidelines and Application
Forms for AACR Membership**

**Also available in the back
of this issue:**

**Advance Registration Form for the
85th Annual Meeting**

**Guidelines for Submitting Disks to
AACR Publications**

604 Author Index