



CONTENTS§

Asterisks * preceding page numbers refer to studies using human-derived material.

Perspectives in Cancer Research

- 7093** Role of Cyclic AMP Receptor Proteins in Growth, Differentiation, and Suppression of Malignancy: New Approaches to Therapy. Yoon S. Cho-Chung.
-
- *7101** Phospholipase A₂ Activation and Autoinduction of Tumor Necrosis Factor Gene Expression by Tumor Necrosis Factor. David R. Spriggs, Matthew L. Sherman, Kyoko Imamura, Mitsunobu Mohri, Christina Rodriguez, Gregory Robbins, and Donald W. Kufe.
- 7108** Changes in Intratumor pH by Two Heatings. Jyh-Cherng Lin and Chang W. Song.
- *7112** Patterns of Maté Drinking in a Brazilian City. Cesar G. Victora, Nubia Muñoz, Bernardo L. Horta, and Everton O. Ramos.
- *7116** Phorbol Ester Effects on Topoisomerase II Activity and Gene Expression in HL-60 Human Leukemia Cells with Different Prolivities toward Monocytoid Differentiation. Leonard A. Zwelling, Michael Hinds, Diana Chan, Elizabeth Altschuler, Janice Mayes, and Theodore F. Zipf.
- *7123** Potentiation of Tumor Lysis by a Bispecific Antibody that Binds to CA19-9 Antigen and the Fcγ Receptor Expressed by Human Large Granular Lymphocytes. Irma García de Palazzo, Cicek Gerçel-Taylor, Joanne Kitson, and Louis M. Weiner.
- *7129** Occupations of Parents of Children with Retinoblastoma: A Report from the Children's Cancer Study Group. Greta R. Bunin, Alena Petrakova, Anna T. Meadows, Beverly S. Emanuel, Jonathan D. Buckley, William G. Woods, and G. Denman Hammond.
- *7134** Effect of Tamoxifen on DNA Synthesis and Proliferation of Human Malignant Glioma Lines *in Vitro*. Ian F. Pollack, Margaret S. Randall, Matthew P. Kristofik, Robert H. Kelly, Robert G. Selker, and Frank T. Vertosick, Jr.
- *7139** Effects of Fatty Acids and Inhibitors of Eicosanoid Synthesis on the Growth of a Human Breast Cancer Cell Line in Culture. David P. Rose and Jeanne M. Connolly.
- 7145** Posttranslational Control of Cyclic AMP-dependent Protein Kinase by Phorbol Ester in Normal but not in Chemically Transformed 3T3 Cells. Hee-Young Park and Judith Campisi.
- *7153** *In Vitro* Migration of Lymphocytes through Collagen Matrix: Arrested Locomotion in Tumor-infiltrating Lymphocytes. Kelli G. Applegate, Charles M. Balch, and Neal R. Pellis.
- *7159** Correlation between Seric Antitumor Activity and Concomitant Resistance in Mice Bearing Nonimmunogenic Tumors. Raúl A. Ruggiero, Oscar D. Bustuobad, Paula Cramer, R. Daniel Bonfil, and Christiane Dosne Pasqualini.
- *7166** Genetic Changes and Histopathological Types in Colorectal Tumors from Patients with Familial Adenomatous Polyposis. Michiko Miyaki, Madoka Seki, Mieko Okamoto, Akiyoshi Yamanaka, Yoshiharu Maeda, Kiyoko Tanaka, Rei Kikuchi, Takeo Iwama, Tatsuro Ikeuchi, Akira Tonomura, Yusuke Nakamura, Ray White, Yoshio Miki, Joji Utsunomiya, and Morio Koike.
- *7174** Ether-linked Phosphoglyceride Content of Human Leukemia Cells. Marie C. Chabot, Dianne G. Greene, Joni K. Brockschmidt, Robert L. Capizzi, and Robert L. Wykle.
- *7179** Role of Insulin-like Growth Factor-related Peptides in the Estradiol-, Prolactin-, and Progesterone-stimulated Growth of *N*-Nitrosomethylurea-induced Rat Mammary Tumors in Soft Agar. Andrea Manni, Carol Wright, Betty Badger, James Lynch, and Laurence Demers.
- *7184** Allelotype of Breast Cancer: Cumulative Allele Losses Promote Tumor Progression in Primary Breast Cancer. Takaaki Sato, Akira Tanigami, Kazuhiro Yamakawa, Futoshi Akiyama, Fujio Kasumi, Goi Sakamoto, and Yusuke Nakamura.
- *7190** Role of Transforming Growth Factor β in the Proliferative Effect of 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin on Human Squamous Carcinoma Cells. Charles D. Hébert, Qun-Li Cao, and Linda S. Birnbaum.
- *7198** Enhanced Expression of DNA Topoisomerase II by Recombinant Human Granulocyte Colony-stimulating Factor in Human Leukemia Cells. Masayuki Towatari, Yoshinori Ito, Yoshihisa Morishita, Mitsune Tanimoto, Kohei Kawashima, Yasuo Morishima, Toshiwo Andoh, and Hidehiko Saito.
- *7203** High Activity of Mitochondrial Glycerol Phosphate Dehydrogenase in Insulinomas and Carcinoid and Other Tumors of the Amine Precursor Uptake Decarboxylation System. Michael J. MacDonald, Thomas F. Warner, and Robert J. Mertz.
- *7206** Phase I Trial of Dipyridamole with 5-Fluorouracil and Folinic Acid. G. T. Budd, A. Jayaraj, D. Grabowski, D. Adelstein, L. Bauer, J. Boyett, R. Bukowski, S. Murthy, and J. Weick.
- *7212** Inhibitory Effects of Estrogen on the Growth of a Human Esophageal Carcinoma Cell Line. Hiroaki Ueo, Hideo Matsuoka, Keizo Sugimachi, Hiroyuki Kuwano, Masaki Mori, and Tsuyoshi Akiyoshi.
- *7216** Elimination of Small Cell Carcinoma of the Lung from Human Bone Marrow by Monoclonal Antibodies and Immunomagnetic Beads. James J. Vredenburgh and Edward D. Ball.
- *7221** Phorbol Ester-induced Macrophage-like Differentiation of Human Promyelocytic Leukemia (HL-60) Cells Occurs Independently of Transferrin Availability. Ian D. Trayner and Michael J. Clemens.
- *7226** Pharmacology of Fludarabine Phosphate after a Phase I/II Trial by a Loading Bolus and Continuous Infusion in Pediatric Patients. Vassilios I. Avramis, Josette Champagne, Judith Sato, Mark Krailo, Lawrence J. Ettinger, David G. Poplack, Jerry Finklestein, Gregory Reaman, G. Denman Hammond, and John S. Holcenberg.

§ The CONTENTS arranged by Subject Category can be found immediately following these CONTENTS.

- *7232** Human Colorectal Cancer: High Frequency of Deletions at Chromosome 1p35. Ilona Leister, Andreas Weith, Silke Bruderlein, Celina Cziepluch, Daoroon Kangwanpong, Peter Schlag, and Manfred Schwab.
- 7236** Effects of Various Photoradiation Regimens on the Antitumor Efficacy of Photodynamic Therapy for R3230AC Mammary Carcinomas. Scott L. Gibson, Karl R. VanDerMeid, Richard S. Murant, Richard F. Raubertas, and Russell Hilf.
- *7242** Expression of the *smg p25A* (a *ras p21*-like GTP-binding Protein) Gene in Human Neuroblastoma Cell Lines and Tumor Tissues. Kimihiko Sano, Hajime Nakamura, Satoshi Mabuchi, Takeo Tanaka, Akira Nakagawara, and Yoshimi Takai.
- *7246** Radiolocalization of Human Pancreatic Tumors in Athymic Mice by Monoclonal Antibody DU-PAN 1. Andrew J. Worlock, Michael R. Zalutsky, and Richard S. Metzgar.
- 7252** Changes in Radiation Sensitization Induced by Fluosol-DA as Measured by ³¹P Nuclear Magnetic Resonance Spectroscopy. Jason A. Koutcher, Alan A. Alfieri, Alice B. Kornblith, Mary L. Devitt, David Cowburn, Douglas Ballon, and Jae H. Kim.
- *7257** Regulation of HL-60 Differentiation by Lipoxygenase Pathway Metabolites *in Vitro*. Alan M. Miller, Steven M. Kobb, and Raquel McTiernan.
- 7261** Metastasis-associated Murine Melanoma Cell Surface Galactosyltransferase: Characterization of Enzyme Activity and Identification of the Major Surface Substrates. Antonino Passaniti and Gerald W. Hart.
- *7272** Pharmacokinetics in Patients of an Anti-Carcinoembryonic Antigen Antibody Radiolabeled with Indium-111 Using a Novel Diethylenetriamine Pentaacetic Acid Chelator. D. J. Hnatowich, M. Rusckowski, A. B. Brill, D. A. Siebecker, H. Misra, G. Mardirossian, H. Bushe, A. Rescigno, S. Stevens, D. K. Johnson, and T. W. Griffin.
- *7279** Enhancement of the Toxicity and DNA Incorporation of Arabinosyl-5-azacytosine and 1- β -D-Arabinofuranosylcytosine by Cyclopentenyl Cytosine. Jean L. Grem and Carmen J. Allegra.
- *7285** Characterization of a Receptor-negative, Hormone-nonresponsive Clone Derived from a T47D Human Breast Cancer Cell Line Kept under Estrogen-free Conditions. Catherine S. Murphy, John J. Pink, and V. Craig Jordan.
- *7293** Metabolism of Diaziquone by NAD(P)H:(Quinone Acceptor) Oxidoreductase (DT-Diaphorase): Role in Diaziquone-induced DNA Damage and Cytotoxicity in Human Colon Carcinoma Cells. David Siegel, Neil W. Gibson, Peter C. Preusch, and David Ross.
- 7301** Inhibition of *in Vivo* Tumor Growth by a Monoclonal IgM Antibody Recognizing Tumor Cell Surface Carbohydrates. Juana Gil, Rita Alvarez, Juan E. Viñuela, José G. Ruiz de Morales, Ana Bustos, Emilio G. De la Concha, and José L. Subiza.
- 7307** Cytotoxic Effects of Cell Cycle Phase Specific Agents: Result of Cell Cycle Perturbation. Andrew L. Kung, Anders Zetterberg, Steven W. Sherwood, and Robert T. Schimke.
- *7318** Intraperitoneal Recombinant γ -Interferon in Patients with Recurrent Ascitic Ovarian Carcinoma: Modulation of Cytotoxicity and Cytokine Production in Tumor-associated Effectors and of Major Histocompatibility Antigen Expression on Tumor Cells. P. Allavena, F. Peccatori, D. Maggioni, A. Erroi, M. Sironi, N. Colombo, A. Lissoni, A. Galazka, W. Meiers, C. Mangioni, and A. Mantovani.
- *7324** Differential Response of Nontumorigenic and Tumorigenic Human Papillomavirus Type 16-positive Epithelial Cells to Transforming Growth Factor β_1 . L. Braun, M. Dürst, R. Mikumo, and P. Grupos.
- *7333** Characterization and Distribution in Human Tissues of a Glycoprotein Antigen Defined by Monoclonal Antibody 1BE₁₂ Raised against the Human Breast Cancer Cell Line T47D. Gianfranco Pancino, Colette Charpin, Eduardo Osinaga, Béatrice Betaille, Martine Le Roy, Fabien Calvo, and Alberto Roseto.
- *7343** Interleukin 2 and Lymphokine-activated Killer Cell Therapy: Analysis of a Bolus Interleukin 2 and a Continuous Infusion Interleukin 2 Regimen. Jeffrey W. Clark, John W. Smith II, Ronald G. Steis, Walter J. Urba, Edward Crum, Robin Miller, John McKnight, JoAnn Beman, Henry C. Stevenson, Stephen Creekmore, Michael Stewart, Kevin Conlon, Mario Sznol, Peter Kremers, Paul Cohen, and Dan L. Longo.
- *7351** Tumor Progression in Four Mammary Epithelial Cell Lines Derived from the Same Patient. Vimla Band, Deborah Zajchowski, Karen Swisshelm, Douglas Trask, Victoria Kulesa, Craig Cohen, James Connolly, and Ruth Sager.
- *7358** *In Vivo* Invasion Assay of Low Passage Cultured Cells Derived from Human Lung Cancer Using Deepithelialized Rat Tracheas Xenotransplanted into Nude Mice. Hisami Yamakawa, Masayuki Baba, and Yutaka Yamaguchi.
- *7364** Resistance of Human Ovarian Cancer Cells to Tumor Necrosis Factor and Lymphokine-activated Killer Cells: Correlation with Expression of HER2/*neu* Oncogenes. Alan Lichtenstein, James Berenson, Joseph F. Gera, Kristine Waldburger, Otoniel Martinez-Maza, and Jonathan S. Berek.
- *7371** Down-Regulated *c-myc* Expression Inhibits DNA Synthesis of T-Leukemia Cells in Most Patients. Donatella Venturelli, Maria Teresa Mariano, Cezary Szczylik, Mauro Valtieri, Beverly Lange, William Crist, Michael Link, and Bruno Calabretta.
- *7376** Contrast-enhanced Magnetic Resonance Imaging of Tumor-bearing Mice Treated with Human Recombinant Tumor Necrosis Factor α . Klaus P. Aicher, Jean W. Dupon, David L. White, Sharon L. Aukerman, Michael E. Moseley, Richard Juster, Werner Rosenau, Jeffrey L. Winkelhake, and Robert C. Brasch.
- *7382** Pharmacokinetic Analysis of Immunotoxin Uptake in Solid Tumors: Role of Plasma Kinetics, Capillary Permeability, and Binding. Cynthia Sung, Richard J. Youle, and Robert L. Dedrick.
- *7393** Immunohistochemical Localization of Basic Fibroblast Growth Factor in Astrocytomas. David Zagzag, Douglas C. Miller, Yasufumi Sato, Daniel B. Rifkin, and David E. Burstein.
-
- Advances in Brief**
- 7399** Role of *bcl-2* in Growth Factor Triggered Signal Transduction. Subrata Haldar, John C. Reed, Christine Beatty, and Carlo M. Croce.
- Meeting Reports**
- 7402** Second Annual Pezcoller Symposium: Therapeutic Implications of the Molecular Biology of Breast Cancer. Marc Lippman and Enrico Mihich.

7405 Carcinogenesis and Chemotherapy—Cancer’s Continuing Core Challenges: Third Charles Heidelberger Symposium. Toshio Kuroki.

7411 Erratum
S. S. Yang *et al.*, 50 (Suppl.): 5658s–5667s, 1990.

7410 Announcements
Eighty-second Annual Meeting of the AACR
AACR Special Conferences in Cancer Research
Future Annual Meetings of the AACR
Calendar of Events

7412 Author Index

7413 Statement of Ownership, Management and Circulation

NOTE: AACR forms available in the back of this issue—

- **Application for Active and Corresponding Membership**
- **Application for Associate Membership**

Cancer Research

VOLUME 50 • NUMBER 22

CONTENTS Arranged by Subject Category

Perspectives in Cancer Research

- 7093 **Role of Cyclic AMP Receptor Proteins in Growth, Differentiation, and Suppression of Malignancy: New Approaches to Therapy.** Yoon S. Cho-Chung.

BASIC SCIENCES

Biochemistry and Biophysics

- *7116 **Phorbol Ester Effects on Topoisomerase II Activity and Gene Expression in HL-60 Human Leukemia Cells with Different Prolivities toward Monocytoid Differentiation.** Leonard A. Zwelling, Michael Hinds, Diana Chan, Elizabeth Altschuler, Janice Mayes, and Theodore F. Zipf.
- 7145 **Posttranslational Control of Cyclic AMP-dependent Protein Kinase by Phorbol Ester in Normal but not in Chemically Transformed 3T3 Cells.** Hee-Young Park and Judith Campisi.
- *7174 **Ether-linked Phosphoglyceride Content of Human Leukemia Cells.** Marie C. Chabot, Dianne G. Greene, Joni K. Brockschmidt, Robert L. Capizzi, and Robert L. Wykle.
- *7221 **Phorbol Ester-induced Macrophage-like Differentiation of Human Promyelocytic Leukemia (HL-60) Cells Occurs Independently of Transferrin Availability.** Ian D. Trayner and Michael J. Clemens.
- 7261 **Metastasis-associated Murine Melanoma Cell Surface Galactosyltransferase: Characterization of Enzyme Activity and Identification of the Major Surface Substrates.** Antonino Passaniti and Gerald W. Hart.

Carcinogenesis

- *7190 **Role of Transforming Growth Factor β in the Proliferative Effect of 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin on Human Squamous Carcinoma Cells.** Charles D. Hébert, Qun-Li Cao, and Linda S. Birnbaum.
- *7324 **Differential Response of Nontumorigenic and Tumorigenic Human Papillomavirus Type 16-positive Epithelial Cells to Transforming Growth Factor β_1 .** L. Braun, M. Dürst, R. Mikumo, and P. Gruppuso.

Endocrinology

- *7179 **Role of Insulin-like Growth Factor-related Peptides in the Estradiol-, Prolactin-, and Progesterone-stimulated Growth of *N*-Nitrosomethylurea-induced Rat Mammary Tumors in Soft Agar.** Andrea Manni, Carol Wright, Betty Badger, James Lynch, and Laurence Demers.
- 7203 **High Activity of Mitochondrial Glycerol Phosphate Dehydrogenase in Insulinomas and Carcinoid and Other Tumors of the Amine Precursor Uptake Decarboxylation System.** Michael J. MacDonald, Thomas F. Warner, and Robert J. Mertz.
- 7285 **Characterization of a Receptor-negative, Hormone-nonresponsive Clone Derived from a T47D Human Breast Cancer Cell Line Kept under Estrogen-free Conditions.** Catherine S. Murphy, John J. Pink, and V. Craig Jordan.

Immunology

- *7101 **Phospholipase A₂ Activation and Autoinduction of Tumor Necrosis Factor Gene Expression by Tumor Necrosis Factor.** David R. Spriggs, Matthew L. Sherman, Kyoko Imamura, Mitsunobu Mohri, Christina Rodriguez, Gregory Robbins, and Donald W. Kufe.
- *7123 **Potential of Tumor Lysis by a Bispecific Antibody that Binds to CA19-9 Antigen and the Fc γ Receptor Expressed by Human Large Granular Lymphocytes.** Irma García de Palazzo, Cicek Gerçel-Taylor, Joanne Kitson, and Louis M. Weiner.
- *7153 ***In Vitro* Migration of Lymphocytes through Collagen Matrix: Arrested Locomotion in Tumor-infiltrating Lymphocytes.** Kelli G. Applegate, Charles M. Balch, and Neal R. Pellis.
- *7216 **Elimination of Small Cell Carcinoma of the Lung from Human Bone Marrow by Monoclonal Antibodies and Immunomagnetic Beads.** James J. Vredenburgh and Edward D. Ball.
- *7246 **Radiolocalization of Human Pancreatic Tumors in Athymic Mice by Monoclonal Antibody DU-PAN 1.** Andrew J. Worlock, Michael R. Zalutsky, and Richard S. Metzgar.
- 7301 **Inhibition of *in Vivo* Tumor Growth by a Monoclonal IgM Antibody Recognizing Tumor Cell Surface Carbohydrates.** Juana Gil, Rita Alvarez, Juan E. Viñuela, José G. Ruiz de Morales, Ana Bustos, Emilio G. De la Concha, and José L. Subiza.
- *7318 **Intraperitoneal Recombinant γ -Interferon in Patients with Recurrent Ascitic Ovarian Carcinoma: Modulation of Cytotoxicity and Cytokine Production in Tumor-associated Effectors and of Major Histocompatibility Antigen Expression on Tumor Cells.** P. Allavena, F. Peccatori, D. Maggioni, A. Erroi, M. Sironi, N. Colombo, A. Lissoni, A. Galazka, W. Meiers, C. Mangioni, and A. Mantovani.
- *7364 **Resistance of Human Ovarian Cancer Cells to Tumor Necrosis Factor and Lymphokine-activated Killer Cells: Correlation with Expression of HER2/*neu* Oncogenes.** Alan Lichtenstein, James Berenson, Joseph F. Gera, Kristine Waldburger, Otoniel Martinez-Maza, and Jonathan S. Berek.

Molecular Biology and Genetics

- *7166 **Genetic Changes and Histopathological Types in Colorectal Tumors from Patients with Familial Adenomatous Polyposis.** Michiko Miyaki, Madoka Seki, Mieko Okamoto, Akiyoshi Yamanaka, Yoshiharu Maeda, Kiyoko Tanaka, Rei Kikuchi, Takeo Iwama, Tatsuro Ikeuchi, Akira Tonomura, Yusuke Nakamura, Ray White, Yoshio Miki, Joji Utsunomiya, and Morio Koike.
- *7184 **Allelotype of Breast Cancer: Cumulative Allele Losses Promote Tumor Progression in Primary Breast Cancer.** Takaaki Sato, Akira Tanigami, Kazuhiro Yamakawa, Futoshi Akiyama, Fujio Kasumi, Goi Sakamoto, and Yusuke Nakamura.
- *7232 **Human Colorectal Cancer: High Frequency of Deletions at Chromosome 1p35.** Ilona Leister, Andreas Weith, Silke Bröderlein, Celina Cziepluch, Daoroong Kangwanpong, Peter Schlag, and Manfred Schwab.
- *7242 **Expression of the *smg* p25A (a *ras* p21-like GTP-binding Protein) Gene in Human Neuroblastoma Cell Lines and Tumor Tissues.** Kimihiko Sano, Hajime Nakamura, Satoshi Mabuchi, Takeo Tanaka, Akira Nakagawara, and Yoshimi Takai.

* Indicates studies using human-derived material.

- *7371 **Down-Regulated *c-myb* Expression Inhibits DNA Synthesis of T-Leukemia Cells in Most Patients.** Donatella Venturelli, Maria Teresa Mariano, Cezary Szczylik, Mauro Valtieri, Beverly Lange, William Crist, Michael Link, and Bruno Calabretta.

- *7333 **Characterization and Distribution in Human Tissues of a Glycoprotein Antigen Defined by Monoclonal Antibody 1BE₁₂ Raised against the Human Breast Cancer Cell Line T47D.** Gianfranco Pancino, Colette Charpin, Eduardo Osinaga, Béatrice Betaille, Martine Le Roy, Fabien Calvo, and Alberto Roseto.

- *7351 **Tumor Progression in Four Mammary Epithelial Cell Lines Derived from the Same Patient.** Vimla Band, Deborah Zajchowski, Karen Swisshelm, Douglas Trask, Victoria Kulesa, Craig Cohen, James Connolly, and Ruth Sager.

- *7358 ***In Vivo* Invasion Assay of Low Passage Cultured Cells Derived from Human Lung Cancer Using Deepithelialized Rat Tracheas Xenotransplanted into Nude Mice.** Hisami Yamakawa, Masayuki Baba, and Yutaka Yamaguchi.

- *7393 **Immunohistochemical Localization of Basic Fibroblast Growth Factor in Astrocytomas.** David Zagzag, Douglas C. Miller, Yasufumi Sato, Daniel B. Rifkin, David E. Burstein.

Preclinical Pharmacology and Experimental Therapeutics

- *7198 **Enhanced Expression of DNA Topoisomerase II by Recombinant Human Granulocyte Colony-stimulating Factor in Human Leukemia Cells.** Masayuki Towatari, Yoshinori Ito, Yoshihisa Morishita, Mitsune Tanimoto, Kohei Kawashima, Yasuo Morishima, Toshiwo Andoh, and Hidehiko Saito.

- *7212 **Inhibitory Effects of Estrogen on the Growth of a Human Esophageal Carcinoma Cell Line.** Hiroaki Ueo, Hideo Matsuoka, Keizo Sugimachi, Hiroyuki Kuwano, Masaki Mori, and Tsuyoshi Akiyoshi.

- 7236 **Effects of Various Photoradiation Regimens on the Antitumor Efficacy of Photodynamic Therapy for R3230AC Mammary Carcinomas.** Scott L. Gibson, Karl R. VanDerMeid, Richard S. Murant, Richard F. Raubertas, and Russell Hilf.

- 7252 **Changes in Radiation Sensitization Induced by Fluosol-DA as Measured by ³¹P Nuclear Magnetic Resonance Spectroscopy.** Jason A. Koutcher, Alan A. Alfieri, Alice B. Kornblith, Mary L. Devitt, David Cowburn, Douglas Ballon, and Jae H. Kim.

- *7279 **Enhancement of the Toxicity and DNA Incorporation of Arabinosyl-5-azacytosine and 1-β-D-Arabinofuranosylcytosine by Cyclopentenyl Cytosine.** Jean L. Grem and Carmen J. Allegra.

- *7293 **Metabolism of Diaziquone by NAD(P)H:(Quinone Acceptor) Oxidoreductase (DT-Diaphorase): Role in Diaziquone-induced DNA Damage and Cytotoxicity in Human Colon Carcinoma Cells.** David Siegel, Neil W. Gibson, Peter C. Preusch, and David Ross.

- 7307 **Cytotoxic Effects of Cell Cycle Phase Specific Agents: Result of Cell Cycle Perturbation.** Andrew L. Kung, Anders Zetterberg, Steven W. Sherwood, and Robert T. Schimke.

- *7376 **Contrast-enhanced Magnetic Resonance Imaging of Tumor-bearing Mice Treated with Human Recombinant Tumor Necrosis Factor α.** Klaus P. Aicher, Jean W. Dupon, David L. White, Sharon L. Aukerman, Michael E. Moseley, Richard Juster, Werner Rosenau, Jeffrey L. Winkelhake, and Robert C. Brasch.

- *7382 **Pharmacokinetic Analysis of Immunotoxin Uptake in Solid Tumors: Role of Plasma Kinetics, Capillary Permeability, and Binding.** Cynthia Sung, Richard J. Youle, and Robert L. Dedrick.

Tumor Biology

- 7108 **Changes in Intratumor pH by Two Heatings.** Jyh-Cherng Lin and Chang W. Song.

- *7134 **Effect of Tamoxifen on DNA Synthesis and Proliferation of Human Malignant Glioma Lines *in Vitro*.** Ian F. Pollack, Margaret S. Randall, Matthew P. Kristofik, Robert H. Kelly, Robert G. Selker, and Frank T. Vertosick, Jr.

- 7139 **Effects of Fatty Acids and Inhibitors of Eicosanoid Synthesis on the Growth of a Human Breast Cancer Cell Line in Culture.** David P. Rose and Jeanne M. Connolly.

- *7159 **Correlation between Seric Antitumor Activity and Concomitant Resistance in Mice Bearing Nonimmunogenic Tumors.** Raúl A. Ruggiero, Oscar D. Bustuabad, Paula Cramer, R. Daniel Bonfil, and Christiane Dosne Pasqualini.

- *7257 **Regulation of HL-60 Differentiation by Lipoygenase Pathway Metabolites *in Vitro*.** Alan M. Miller, Steven M. Kobb, and Raquel McTiernan.

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

Clinical

- 7129 **Occupations of Parents of Children with Retinoblastoma: A Report from the Children's Cancer Study Group.** Greta R. Bunin, Alena Petrakova, Anna T. Meadows, Beverly S Emanuel, Jonathan D. Buckley, William G. Woods, and G. DENMAN Hammond.

- 7206 **Phase I Trial of Dipyridamole with 5-Fluorouracil and Folinic Acid.** G. T. Budd, A. Jayaraj, D. Grabowski, D. Adelstein, L. Bauer, J. Boyett, R. Bukowski, S. Murthy, and J. Weick.

- 7226 **Pharmacology of Fludarabine Phosphate after a Phase I/II Trial by a Loading Bolus and Continuous Infusion in Pediatric Patients.** Vassilios I. Avramis, Josette Champagne, Judith Sato, Mark Krailo, Lawrence J. Ettinger, David G. Poplack, Jerry Finklestein, Gregory Reaman, G. Denman Hammond, and John S. Holcenberg.

- 7272 **Pharmacokinetics in Patients of an Anti-Carcinoembryonic Antigen Antibody Radiolabeled with Indium-111 Using a Novel Diethylenetriamine Pentaacetic Acid Chelator.** D. J. Hnatowich, M. Rusckowski, A. B. Brill, D. A. Siebecker, H. Misra, G. Mardirossian, H. Bushe, A. Rescigno, S. Stevens, D. K. Johnson, and T. W. Griffin.

- 7343 **Interleukin 2 and Lymphokine-activated Killer Cell Therapy: Analysis of a Bolus Interleukin 2 and a Continuous Infusion Interleukin 2 Regimen.** Jeffrey W. Clark, John W. Smith II, Ronald G. Steis, Walter J. Urba, Edward Crum, Robin Miller, John McKnight, JoAnn Beman, Henry C. Stevenson, Stephen Creekmore, Michael Stewart, Kevin Conlon, Mario Sznol, Peter Kremers, Paul Cohen, and Dan L. Longo.

Epidemiological

- 7112 **Patterns of Maté Drinking in a Brazilian City.** Cesar G. Victora, Nubia Muñoz, Bernardo L. Horta, and Everton O. Ramos.

Advances in Brief

- 7399 **Role of *bcl-2* in Growth Factor Triggered Signal Transduction.** Subrata Haldar, John C. Reed, Christine Beatty, and Carlo M. Croce.

Meeting Reports

- 7402 **Second Annual Pezcoller Symposium: Therapeutic Implications of the Molecular Biology of Breast Cancer.** Marc Lippman and Enrico Mihich.

7405 Carcinogenesis and Chemotherapy—Cancer’s Continuing Core Challenges: Third Charles Heidelberger Symposium. Toshio Kuroki.

7411 Erratum
S. S. Yang *et al.*, 50 (Suppl.): 5658s–5667s, 1990.

7410 Announcements
Eighty-second Annual Meeting of the AACR
AACR Special Conferences in Cancer Research
Future Annual Meetings of the AACR
Calendar of Events

7412 Author Index

7413 Statement of Ownership, Management and Circulation

NOTE: AACR forms available in the back of this issue—
• **Application for Active and Corresponding Membership**
• **Application for Associate Membership**

Cancer Research

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

50 (22)

Cancer Res 1990;50:7093-7411.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/50/22.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/50/22.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.