



## CONTENTS

sterisks \* preceding page numbers refer to clinical studies.

- 1769** **Demonstration of Embryonic-type Hemoglobin in Extramedullary Hematopoietic Cells in the Liver during Experimental Liver Carcinogenesis by 3'-Methyl-4-dimethylaminoazobenzene.** Katsuhiko Enomoto, Kimimaro Dempo, Michio Mori, and Tamenori Onoe.
- 1774** **Differences in Colonic Nuclear Proteins of Two Mouse Strains with Different Susceptibilities to 1,2-Dimethylhydrazine-induced Carcinogenesis.** Lidia C. Boffa, Bhalchandra A. Diwan, Rosemarie Gruss, and Vincent G. Allfrey.
- 1781** **Benzo(a)pyrene Metabolism in Bovine Aortic Endothelial and Bovine Lung Fibroblast-like Cell Cultures.** William M. Baird, Ruth Chemerys, Judith B. Grinspan, Stephen N. Mueller, and Elliot M. Levine.
- 1787** **Purification and Properties of Hamster Liver Ligands, Glutathione S-Transferases.** Garry John Smith, Virginia Sapico Ohl, and Gerald Litwack.
- 1791** **Large-Capacity Separation of Malignant Cells and Lymphocytes from the Furth Mast Cell Tumor in a Reorienting Zonal Rotor.** Cathy L. Green, Theresa P. Pretlow, Kent A. Tucker, Edwin L. Bradley, Jr., William J. Cook, Annette M. Pitts, and Thomas G. Pretlow II.
- 1797** **Effect of Carcinogenic N-Alkyl-N-nitroso Compounds on Nicotinamide Adenine Dinucleotide Metabolism.** Myron K. Jacobson, Viktorya Levi, Hector Juarez-Salinas, Rodney A. Barton, and Elaine L. Jacobson.
- 1803** **Reduction of Nicotinamide Adenine Dinucleotide Levels by Ultimate Carcinogens in Human Lymphocytes.** Patrick W. Rankin, Myron K. Jacobson, Virgil R. Mitchell, and David L. Busbee.
- 1808** **Interaction of Dimethylbenzanthracene and Diethylstilbestrol on Mammary Adenocarcinoma Formation in Female ACI Rats.** Claire J. Shellabarger, Barbara McKnight, John Patrick Stone, and Seymour Holtzman.
- 1812** **Selection and Characterization in Culture of Mammary Tumor Cells with Distinctive Growth Properties *in Vivo*.** Keith G. Danielson, Lawrence W. Anderson, and Howard L. Hosick.
- 1820** **Positive Correlation between Histological Tumor Involvement and Generation of Tumor Cell Colonies in Agarose in Specimens Taken Directly from Patients with Small-Cell Carcinoma of the Lung.** Desmond N. Carney, Adi F. Gazdar, and John D. Minna.
- \*1824** **Thymidine Requirements for the Rescue of Patients Treated with High-Dose Methotrexate.** Stephen B. Howell, Kenneth Herbst, Gerry R. Boss, and Emil Frei III.
- 1830** **Cellular Potentials of Normal and Cancerous Fibroblasts and Hepatocytes.** Richard Binggeli and Ivan L. Cameron.
- 1836** **Mammary Gland Cell-mediated Mutagenesis of Mammalian Cells by Organ-specific Carcinogens.** Michael N. Gould.
- 1842** **Partial Purification and Characterization of a Lymphocyte-inhibitory Factor(s) in Ascitic Fluids from Ovarian Cancer Patients.** Allan D. Hess, Stanley A. Gall, and Jeffrey R. Dawson.
- 1852** **Potent Bile Salt and Organic Anion Inhibition of Methotrexate Uptake and Accumulation in the Freshly Isolated Rat Hepatocyte.** David A. Gewirtz, Joyce K. Randolph, and I. David Goldman.
- 1858** **Humoral Modulation of Human Acute Myelogenous Leukemia Cell Growth *in Vitro*.** H. Phillip Koeffler and David W. Golde.
- 1863** **Inhibition of Mammary Tumor Growth by Dexamethasone in Rats in the Presence of High Serum Prolactin Levels.** C. F. Aylsworth, P. W. Sylvester, F. C. Leung, and J. Meites.
- 1867** **Postreplication Repair in Three Murine Melanomas, a Mammary Carcinoma, and a Normal Mouse Lung Fibroblast Line.** Helene Z. Hill and Richard B. Setlow.
- 1873** **Glycoprotein Differences in Solid and Ascites Forms of the 13762 Rat Mammary Adenocarcinoma.** John W. Huggins, Tim P. Trenbeath, Anne P. Sherblom, Susan C. Howard, and Kermit L. Carraway.
- 1879** **Comparison of the Carcinogenic Effects of Five Nitrosamines in Guinea Pigs.** Richard H. Cardy and William Lijinsky.
- 1885** **Allopurinol Modification of the Toxicity and Antitumor Activity of 5-Fluorouracil.** Pauline M. Schwartz, Janis M. Dunigan, John C. Marsh, and Robert E. Handschumacher.
- \*1890** **Relationships of S-Phase Fraction of Breast Carcinoma in Relapse to Duration of Remission, Estrogen Receptor Content, Therapeutic Responsiveness, and Duration of Survival.** John S. Meyer and Jeannette Y. Lee.

- 1897 **Early Induction of Mouse Urinary Bladder Ornithine Decarboxylase Activity by Rodent Vesical Carcinogens.** M. Matsushima and George T. Bryan.
- \*1902 **Application of a Simple Competitive Protein-binding Assay Technique to the Pharmacokinetics of *N*-(Phosphonacetyl)-L-aspartate in Humans.** Charles Erlichman, John M. Strong, and Bruce A. Chabner.
- 1907 **Comparison between the Cellular Proteins of Hairy Cell Leukemia and the Leukemic Phase of Other Lymphoproliferative Diseases.** Harvey M. Golomb, Anne H. Nathans, and Glyn Dawson.
- 1915 **Effect of Time and Duration of Exposure to 12-*O*-Tetradecanoylphorbol-13-acetate on X-Ray Transformation of C3H 10T $\frac{1}{2}$  Cells.** Ann R. Kennedy, Gary Murphy, and John B. Little.
- 1921 **Distribution of *N*-Nitrosomethylbenzylamine Evaluated by Whole-Body Radioautography and Densitometry.** Patricia L. Kraft and Steven R. Tannenbaum.
- 1928 **Cellular Pharmacology of *N,N*-Dimethyl Daunorubicin and *N,N*-Dimethyl Adriamycin.** Merrill J. Egorin, Ronald E. Clawson, Louis A. Ross, and Nicholas R. Bachur.
- 1934 **Ultraviolet Light-induced Transformation of Human Cells to Anchorage-independent Growth.** Betsy M. Sutherland, Janet S. Cimino, Neva Delihias, Alice G. Shih, and Rowena P. Oliver.
- 1940 **1- $\beta$ -D-Arabinofuranosylcytosine Nucleotide Inhibition of Sialic Acid Metabolism in WI-38 Cells.** Marjorie W. Myers-Robfogel and Ann C. Spataro.
- 1944 **Effect of Retinoic Acid on Cell Surface Glycopeptides of Cultured Spontaneously Transformed Mouse Fibroblasts (BALB/c 3T12-3 Cells).** Wlodzimierz Sasak, Luigi M. De Luca, L. David Dion, and Carol S. Silverman-Jones.
- 1950 **Inhibition of Growth of Primary and Metastatic Lewis Lung Carcinoma Cells by the Phosphodiesterase Inhibitor Isobutylmethylxanthine.** Przemyslaw Janik, Annlouise Assaf, and John S. Bertram.
- 1955 **Comparative Analyses of Cyclic Adenosine 3':5'-Monophosphate Phosphodiesterases of Human Peripheral Blood Monocytes and Cultured P388D $_1$  Cells.** W. J. Thompson, C. P. Ross, S. J. Strada, E. M. Hersh, and V. R. Lavis.
- 1961 **Effects of DL- $\alpha$ -Methylornithine on Proliferation and Polyamine Content of 9L Rat Brain Tumor Cells.** Jerome Seidenfeld and Laurence J. Marton.
- 1967 **Immunomodulatory Effect of Various Molecular-Weight Maleic Anhydride Divinyl Ethers and Other Agents *in Vivo*.** Michael A. Chirigos and William A. Stylos.
- 1973 **Lethal and Cytokinetic Effects of Mitomycin C on Cultured Human Colon Cancer Cells.** Barthel Barlogie and Benjamin Drewinko.
- 1981 **Comparison of the Skin Tumor-initiating Activities of Dihydrodiols and Diol-Epoxides of Various Polycyclic Aromatic Hydrocarbons.** T. J. Slaga, G. L. Gleason, G. Mills, L. Ewald, P. P. Fu, H. M. Lee, and R. G. Harvey.
- 1985 **Mutagenicity of Benzo(e)pyrene and Triphenylene Tetrahydroepoxides and Diol-Epoxides in Bacterial and Mammalian Cells.** Alexander E. Wood, Richard L. Chang, Mou-Tuan Huang, Wayne Levin, Roland E. Lehr, Subodh Kumar, Dhiren R. Thakker, Haruhiko Yagi, Donald M. Jerina, and Allan H. Conney.
- 1990 **Activities of L-Dopa Decarboxylase and Diamine Oxidase (Histaminase) in Human Lung Cancers and Decarboxylase as a Marker for Small (Oat) Cell Cancer in Cell Culture.** Stephen B. Baylin, Martin D. Abeloff, Gregory Goodwin, Desmond N. Carney, and Adi F. Gazdar.
- \*1995 **Urinary Excretion of 3-Methoxy-4-hydroxymandelic Acid and 3-Methoxy-4-hydroxyphenylacetic Acid by 288 Patients with Neuroblastoma and Related Neural Crest Tumors.** Elwood H. LaBrosse, Catherine Com-Nougué, Jean-Michel Zucker, Etienne Comoy, Claude Bohuon, Jean Lemerle, and Odile Schweisguth.
- 2002 **Evaluation of Chemiluminescence Generation during Microsomal Metabolism of Some Carcinogens.** Godwin O. Emerole and Robert L. Dixon.
- 2006 **Increased Agglutinability of Bladder Cells by Concanavalin A after Administration of Carcinogens.** Tadao Kakizoe, Hideki Komatsu, Tadao Nijima, Takashi Kawachi, and Takashi Sugimura.
- 2010 **Welbel-Palade Bodies in Endothelial Cells as a Marker for Angiogenesis in Brain Tumors.** Pat Kumar, Shant Kumar, Henry B. Marsden, Patrick G. Lynch, and Elaine Earnshaw.
- 2020 **Glucocorticoid Receptors and *in Vitro* Corticosteroid Sensitivity in Human Thymoma.** Franco O. Ranelletti, Stefano Iacobelli, Marco Carmignani, Gigliola Sica, Clara Natoli, and Pietro Tonali.
- 2026 **Alterations of D-Galactose Metabolism in Morris Hepatomas.** Christian H. Bauer, Reinhard Büchsel, Harold P. Morris, and Werner G. Reutter.
- 2033 **Failure of the Antioxidant Vitamin E to Protect against Adriamycin-induced Cardiotoxicity in the Rabbit.** Johan G. S. Breed, Ariaen N. E. Zimmerman, Jan A. M. A. Dormans, and Herbert M. Pinedo.
- 2039 **Nonspecific Cross-Reacting Antigen in Normal and Leukemic Myeloid Cells and Serum of Leukemic Patients.** B. Wahren, G. Gahrton, and S. Hammarström.
- 2045 **Multifractionated Hyperthermia Treatment of Malignant and Normal Tissue *in Vivo*.** Jens Overgaard, Herman D. Suit, and Alexander M. Walker.
- 2051 **Increase of Antitumor Effect of Bleomycin by Reduced Nicotinamide Adenine Dinucleotide Phosphate and Microsomes *in Vitro* and *in Vivo*.** Naoki Yamanaka, Taketoshi Kato, Keiko Nishida, Satoru Shimizu, Masanori Fukushima, and Kazuo Ota.

- 2054 T- and B-Cell-independent Activation of Syngeneic Macrophages by Murine Sarcoma Cells.** Reidun Olstad, Gustav Gaudernack, Gilla Kaplan, and Rolf Seljelid.
- 2061 Selective Localization and Growth of *Bifidobacterium bifidum* in Mouse Tumors following Intravenous Administration.** Noritaka T. Kimura, Shun'ichiro Taniguchi, Ken Aoki, and Tsuneo Baba.
- 2069 Age-dependent Cell Inactivation by Vincristine Alone or in Combination with 1-Propargyl-5-chloropyrimidin-2-one.** Einar Wibe.
- 2074 Specific Viral Antigens in Rat Cells Transformed by Herpes Simplex Virus Type 2 and in Rat Tumors Induced by Inoculation of Transformed Cells.** Joan C. M. Macnab, L. Visser, A. T. Jamieson, and J. Hay.
- 2080 Announcements**
- 2081 Errata**
- 2082 Author Index**

# Cancer Research

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

## 40 (6)

*Cancer Res* 1980;40:1769-2081.

**Updated version** Access the most recent version of this article at:  
<http://cancerres.aacrjournals.org/content/40/6.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/40/6.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.