



CONTENTS

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

- 2743 **Current Thoughts on the Viral Etiology of Certain Human Cancers: The Richard and Hinda Rosenthal Foundation Award Lecture.** Robert C. Gallo and Flossie Wong-Staal.

BASIC SCIENCES

- *2750 **A Strategy for the Production of Human Monoclonal Antibodies Reactive with Lung Tumor Cell Lines.** Susan P. C. Cole, Barbara G. Campling, Ingrid H. Louwman, Danuta Kozbor, and John C. Roder.
- 2754 **Effect of 2-Acetylaminofluorene on the Binding of Epidermal Growth Factor to Microsomal and Golgi Fractions of Rat Liver Cells.** Zeev Josefsberg, Brian I. Carr, David Hwang, Gegham Barseghian, Cindy Tomkinson, and Arye Lev-Ran.
- 2758 **Dietary Seaweed (*Laminaria*) and Mammary Carcinogenesis in Rats.** Jane Teas, Margaret L. Harbison, and Rebecca S. Gelman.
- *2762 **Blocking of the Response by Human T-Lymphocytes to Extracts of Autologous Cancer by Monoclonal Antibody to Class-I Major Histocompatibility Complex Gene Products in the Leukocyte Adherence Inhibition Assay.** George Shenouda and D. M. P. Thomson.
- *2769 **Transformation of Human Cells by DNA Transfection.** Betsy M. Sutherland and Paula V. Bennett.
- *2773 **Dependence on Treatment Time of Melphalan Resistance and DNA Cross-Linking in Human Melanoma Cell Lines.** Peter G. Parsons.
- 2779 **Protein Synthesis Measured *In Vivo* in Muscle and Liver of Cachectic Tumor-bearing Mice.** Peter W. Emery, Linda Lovell, and Michael J. Rennie.
- 2785 **Long-Term Effects of Exposure to Methylnitrosourea on Blastocysts following Transfer to Surrogate Female Mice.** Philip M. Iannaccone.
- *2790 **Effects of Estradiol and Tamoxifen on Human Breast Cancer Cells in Serum-free Culture.** Philippa D. Darbre, Sally Curtis, and R. J. B. King.
- 2794 **Cytological Effects of Sulfur and Selenium Purine Analogues on Two Transplantable Hepatomas and on Normal Renewing Cells in Mice.** Joan B. Melvin, Thomas H. Haight, and Elizabeth H. Leduc.
- 2799 **Potentiation of Antitumor and Antimetastatic Activities of α -Difluoromethylornithine by Interferon Inducers.** Prasad S. Sunkara, Nellikunja J. Prakash, Andrea L. Rosenberger, Anne C. Hagan, Phillip J. Lachmann, and Gerald D. Mayer.
- 2803 **Effect of an Inorganic and Organic Form of Dietary Selenium on the Promotional Stage of Mammary Carcinogenesis in the Rat.** Henry J. Thompson, L. David Meeker, and Stephen Kokoska.
- *2807 **Inhibition of Glycoprotein Biosynthesis by the Inducers of HL-60 Cell Differentiation, Aclacinomycin A and Marcellomycin.** Michael J. Morin and Alan C. Sartorelli.
- *2813 **Interaction of Monoclonal Antibodies with Cell Surface Antigens of Human Ovarian Carcinomas.** Y. Masuho, M. Zalutsky, R. C. Knapp, and R. C. Bast, Jr.
- 2820 **Cellular and Subcellular Studies of the Biotransformation of Hexamethylmelamine in Rat Isolated Hepatocytes and Intestinal Epithelial Cells.** Paul J. A. Borm, Marie-José J. Mingels, Ank C. Frankhuijzen-Sierevogel, Marja van Graft, Abram Hulshoff, and Jan Noordhoek.
- 2827 **Differential Effects of Surgical Suture Materials in 1,2-Dimethylhydrazine-induced Rat Intestinal Neoplasia.** Ronald N. Calderisi and Hugh J. Freeman.
- 2831 **Colony-forming Ability in Calcium-poor Medium *In Vitro* and Tumorigenicity *In Vivo* Not Coupled in Clones of Transformed Rat Hepatic Epithelial Cells.** Joe W. Grisham, Judith D. Smith, and Ming-Sound Tsao.
- 2835 **Role of Estrogen and Prolactin in Stimulation of Carcinogen-induced Mammary Tumor Development by a High-Fat Diet.** C. F. Aylsworth, D. A. Van Vugt, P. W. Sylvester, and J. Meites.
- 2841 **Chemoimmunotherapy of B16 Melanoma and P388 Leukemia with Cyclophosphamide and Pyrimidinones.** Li H. Li, Mark A. Johnson, Raymond B. Moeller, and Tanya L. Wallace.
- 2848 **Molecular Requirements for the Mutagenicity of Malondialdehyde and Related Acroleins.** Ashis K. Basu and Lawrence J. Marnett.
- *2855 **O⁶-Alkylguanine-DNA Alkyltransferase Activity in Normal Human Tissues and Cells.** Roland C. Grafstrom, Anthony E. Pegg, Benjamin F. Trump, and Curtis C. Harris.
- 2858 **Inhibition of 7,12-Dimethylbenz(a)anthracene-induced Rat Mammary Carcinogenesis by Concomitant or Postcarcinogen Antioxidant Exposure.** David L. McCormick, Nancy Major, and Richard C. Moon.
- 2864 **Effect of Selenium in Combination with *cis*-Diamminedichloroplatinum(II) in the Treatment of Murine Fibrosarcoma.** Jean-Pierre Berry, Catherine Pauwells, Sylvie Tlouzeau, and Geneviève Lespinats.

- 2869 **Influence of Estradiol and Tamoxifen on the Growth of *N*-Nitrosomethylurea-induced Rat Mammary Tumor Cells in Soft Agar.** Baha'Uddin M. Arafah, Nahida H. Gordon, Beth L. Wilhite, and Olof H. Pearson.
- 2873 **A Sensitive Method for Detecting *in Vivo* Formation of *N*-Nitrosomorpholine and Its Application to Rats Given Low Doses of Morpholine and Sodium Nitrite.** Stephen S. Hecht and J. Bradley Morrison.
- *2878 **Comparison of the Metabolic Activation of 7,12-Dimethylbenz(a)anthracene by a Human Hepatoma Cell Line (HepG2) and Low Passage Hamster Embryo Cells.** John DiGiovanni, Jody M. Singer, and Leila Diamond.
- 2885 **Non-Alcohol Dehydrogenase-mediated Metabolism of Methylazoxymethanol in the Deer Mouse, *Peromyscus maniculatus*.** Emerich S. Fiala, Nancy Caswell, Ock Soon Sohn, Michael R. Felder, G. David McCoy, and John H. Weisburger.
- 2892 **Enzymatic Activation and Binding of Adriamycin to Nuclear DNA.** Birandra K. Sinha, Michael A. Trush, Katherine A. Kennedy, and Edward G. Mimnaugh.
- 2897 **Characterization of L5178Y Cell Phenotypes Isolated during Progression of the Tumor-dormant State in DBA/2 Mice.** Deborah L. Trainer and E. Frederick Wheelock.
- *2907 **Glycosaminoglycan Synthesis during Differentiation of HL60/HGPRT⁻ Leukemia Cells Induced by Dimethyl Sulfoxide and 12-O-Tetradecanoylphorbol-13-acetate.** Sharon D. Luikart, Charles A. Maniglia, and Alan C. Sartorelli.
- 2913 **Cell Cycle Kinetics of Rat Hepatocytes in Early Putative Preneoplastic Lesions in Hepatocarcinogenesis.** Joel Rotstein, P. D. M. Macdonald, H. M. Rabes, and Emmanuel Farber.
- 2918 **Genotoxicity of a Variety of Mycotoxins in the Hepatocyte Primary Culture/DNA Repair Test Using Rat and Mouse Hepatocytes.** Hideki Mori, Kiyoshi Kawai, Futoshi Ohbayashi, Tokuro Kuniyasu, Mikio Yamazaki, Takashi Hamasaki, and Gary M. Williams.
- 2924 **Effects of Dietary Compounds on α -Hydroxylation of *N*-Nitrosopyrrolidine and *N'*-Nitrosornicotine in Rat Target Tissues.** Fung-Lung Chung, Amy Juchatz, Jean Vitarius, and Stephen S. Hecht.
- 2929 **Histidinol-mediated Improvement in the Specificity of 1- β -D-Arabinofuranosylcytosine and 5-Fluorouracil in L1210 Leukemia-bearing Mice.** Robert C. Warrington, Timothy G. Muzyka, and Wei D. Fang.
- *2936 **Effects of Hypophysectomy and Hormone Replacement on the Local and Metastatic Growth of Morris Hepatoma 44.** Julius Erdstein, Harvey J. Guyda, and Seymour Mishkin.
- *2942 **Presence of α -2-Macroglobulin in Normal but not in Malignant Cervical Epithelium.** Olli Saksela, Torsten Wahlström, Bengt Meyer, and Antti Vaheri.
- *2947 **Serum-dependent "Cannibalism" and Autodestruction in Cultures of Human Small Cell Carcinoma of the Lung.** Marjoleine Brouwer, Loe de Ley, Constance A. Feltkamp, Job Elema, and Ans P. M. Jongasma.
- *2952 **Characterization of an Established Cell Line from Human Immature Teratoma of the Ovary and Effects of Retinoic Acid on Cell Proliferation.** Yoshihiro Kikuchi, Eiko Momose, Isao Kizawa, Masami Ishida, Hikaru Sunaga, Kiyoshi Mukai, Katsuyoshi Seki, and Koichi Kato.
- 2959 **Changes in Gene Expression following Neoplastic Transformation of Rat Myogenic Cells.** J. Hillion, S. A. Leibovitch, M. P. Leibovitch, M. Raymondjean, J. Kruh, and J. Harel.
- *2966 **Evidence for Functional Platelet-derived Growth Factor Receptors on MG-63 Human Osteosarcoma Cells.** Dana T. Graves, Harry N. Antoniades, Steven R. Williams, and Albert J. Owen.
- *2971 **Relationship between Multiple Forms of Plasminogen Activator in Human Breast Tumors and Plasma and the Presence of Metastases in Lymph Nodes.** Marina Colombi, Sergio Barlati, Henri Magdelenat, and Berta Fiszer-Szafarz.
- 2976 **Dexamethasone Inhibition of Rat Hepatoma Growth and α -Fetoprotein Synthesis.** Dao-Pei Huang, Charles E. Schwartz, Jen-Fu Chiu, and Jeffrey R. Cook.
- 2981 **Selection and Characterization of L1210 Sublines Resistant to Teniposide (VM-26).** Taisheng Lee and DeWayne Roberts.
- 2986 **Flux of Teniposide (VM-26) across the Plasma Membrane of Teniposide-resistant Sublines of L1210 Cells.** Taisheng Lee and DeWayne Roberts.
- *2991 **Coexpression of Simple Epithelial Keratins and Vimentin by Human Mesothelium and Mesothelioma *in Vivo* and in Culture.** Paul J. LaRocca and James G. Rheinwald.
- *3000 **Elimination of Clonogenic T-Leukemic Cells from Human Bone Marrow Using Anti-M, 65,000 Protein Immunotoxins.** Robin C. Stong, Richard J. Youle, and Daniel A. Vallera.
- 3007 **Inhibition by Diphosphonates of Bone Resorption Induced by the Walker Tumor of the Rat.** André Jung, Jacqueline Bornand, Bernadette Mermillod, Claude Edouard, and Pierre J. Meunier.
- 3012 **Involvement of Plasminogen Activator Production with Tumor Metastasis in a Rat Model.** Svein A. Carlsen, Ian A. Ramshaw, and Robert C. Warrington.
- *3017 **Phorbol Ester-induced Differentiation of a Non-T/Non-B Human Leukemic Cell Line (REH) to Macrophage-like Cells.** B. I. Sahai Srivastava, Michiko Koga, and P. Srivastava.
- *3022 **Fibronectin Synthesized by a Human Hepatoma Cell Line.** James E. Glasgow and Robert W. Colman.

- * 3029 Radioimmunological Determination of Cellular Retinol-binding Protein in Human Tissue Extracts.** Göran Fex and Gunvor Johannesson.
- * 3033 Variability in Surface Antigen Expression of Human Breast Epithelial Cells Cultured from Normal Breast, Normal Tissue Peripheral to Breast Carcinomas, and Breast Carcinomas.** Roberto L. Ceriani, Jerry A. Peterson, and Edward W. Blank.
- * 3040 Actin Cytoskeletal Organization Loss in the Benign-to-Malignant Tumor Transition in Cultured Human Colonic Epithelial Cells.** Eileen Friedman, Michael Verderame, Sidney Winawer, and Robert Pollack.
- 3051 Technical Factors Affecting the Reproducibility of Intravesical Mouse Bladder Tumor Implantation during Therapy with *Bacillus Calmette-Guérin*.** Amos Shapiro, David R. Kelley, Dennis M. Oakley, William J. Catalona, and Timothy L. Ratliff.
- 3055 Characterization of Rat Mammary Tumor Cell Populations.** Mozeena Bano, Walter M. Lewko, and William R. Kidwell.
- * 3063 Organ-cultured Epithelial Tissue as an *in Vitro* Model for Invasion: Quantitation and High-Voltage Electron Microscopy of Tumor Cell Attachment.** Peter G. Sacks, Kevin J. Wansor, and Donald F. Parsons.
- * 3075 Subcellular Distribution of Cyclic Adenosine 3':5'-Monophosphate-dependent Protein Kinase during the Chemically Induced Differentiation of HL-60 Cells.** Laurence Elias and Thomas Stewart.
- 3081 Hexose Uptake in 7,12-Dimethylbenz(a)anthracene-preexposed Rat Tracheal Epithelial Cells during the Progression of Neoplasia.** William J. Wasilenko and Ann C. Marchok.
- * 3090 Demonstration of an Extracellular Matrix in Multicellular Tumor Spheroids.** Thore Nederman, Börje Norling, Bengt Glimelius, Jörgen Carlsson, and Ulf Brunk.
- 3098 Carcinogenicity of *N*-Phenyl-1-naphthylamine and *N*-Phenyl-2-naphthylamine in Mice.** Heng-wen Wang, Da Wang, and Ruo-wang Dzeng.
- 3109 Pharmacokinetics of Etoposide (VP16) in Children and Adolescents with Refractory Solid Tumors.** Joseph A. Sinkule, Paul Hutson, F. Ann Hayes, Erlinda Etcubanas, and William Evans.
- 3114 Pharmacokinetics of the Diastereoisomers of Leucovorin after Intravenous and Oral Administration to Normal Subjects.** James A. Straw, Daniele Szapary, and William T. Wynn.
- 3120 Pharmacokinetics of Positron-labeled 1,3-Bis(2-chloroethyl)nitrosourea in Human Brain Tumors Using Positron Emission Tomography.** Mirko Diksic, Kazuhiro Sako, William Feindel, Amami Kato, Y. Lucas Yamamoto, Simin Farrokhzad, and Christopher Thompson.
- 3125 Association of Circulating Immune Complexes with Cytogenetic Abnormalities but not with Prognosis in Acute Nonlymphocytic Leukemia.** Martin M. Crane, Roger D. Rossen, Kenneth B. McCredie, and Jose M. Trujillo.
- 3132 Decreased Stabilization of Prostacyclin Activity in Patients with Bone Tumors.** Paulette Mehta, Nancy Ostrowski, and Lilia Brigmon.
- 3135 Comparative *in Vivo* and *in Vitro* Activation of Human Natural Killer Cells by Two Recombinant α -Interferons Differing in Antiviral Activity.** Bruce S. Edwards, Michael J. Hawkins, and Ernest C. Borden.
- 3140 Heightened Interferon- γ Production by Mononuclear Cells from Bladder Cancer Patients.** Amos Shapiro, Timothy L. Ratliff, David R. Kelley, and William J. Catalona.
- 3144 Hypoxanthine Concentrations in Normal Subjects and Patients with Solid Tumors and Leukemia.** Wally E. Wung and Stephen B. Howell.

* * *

Letter to the Editor

- 3149 Correspondence re: S. Shrivastav, K. R. Stone, D. F. Paulson, and R. A. Bonar. Activation of Cyclophosphamide for *in Vitro* Testing of Cell Sensitivity.** *Cancer Res.*, 40: 4443-4445, 1980. E. Nissen and S. Tanneberger. Reply by Shashi Shrivastav.

Meeting Report

- 3151 Workshop on Chemoprevention of Breast Cancer.** Franco M. Muggia and Ezra M. Greenspan.

3155 Announcements

3157 Recent Deaths

3158 Author Index

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

- 3101 Investigation of Cancer Epidemiology and Study of Carcinogenic Agents in the Shanghai Rubber Industry.** Heng-wen Wang, Xue-jun You, Yong-hua Qu, Wu-fu Wang, Da Wang, You-ming Long, and Jin-ao Ni.
- 3106 Effects of Reserpine on Prolactin Levels and Incidence of Breast Cancer in Postmenopausal Women.** Ronald K. Ross, Annlia Paganini-Hill, Mark D. Krailo, Vibeke R. Gerkins, Brian E. Henderson, and Malcolm C. Pike.

Cancer Research

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

44 (7)

Cancer Res 1984;44:2743-3157.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/44/7.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/44/7.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.