



## CONTENTS

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

### BASIC SCIENCES

- 2963 **Drug Activity and Therapeutic Synergism in Cancer Treatment.** Walter H. Carter, Jr., Galen L. Wampler, Donald M. Stablein, and Eleanor D. Campbell.
- 2972 **Mutagenicity of the Optical Isomers of the Diastereomeric Bay-Region Chrysene 1,2-Diol-3,4-epoxides in Bacterial and Mammalian Cells.** Alexander W. Wood, Richard L. Chang, Wayne Levin, Haruhiko Yagi, Masao Tada, Kamlesh P. Vyas, Donald M. Jerina, and Allan H. Conney.
- 2977 **Inhibition of Ehrlich Ascites Tumor Cell Growth by *Griffonia simplicifolia* I Lectin *In Vivo*.** Allen E. Eckhardt, Barbara N. Malone, and Irwin J. Goldstein.
- 2980 **Zinc-induced Resistance to Alkylating Agent Toxicity.** Robert A. Tobey, M. Duane Enger, Jeffrey K. Griffith, and C. Edgar Hildebrand.
- 2985 **Selenium and the Acute Effects of the Carcinogens, 2-Acetylaminofluorene and Methylazoxymethanol Acetate.** William P. Banner, Queng Hui Tan, and Morris S. Zedeck.
- 2990 **Induction of Spermidine *N*<sup>1</sup>-Acetyltransferase by Dialkylnitrosamines.** Isao Matsui and Anthony E. Pegg.
- 2996 **Trapping of DNA-reactive Metabolites of Therapeutic or Carcinogenic Agents by Carbon-14-labeled Synthetic Polynucleotides.** Jitendra R. Mehta and David B. Ludlum.
- 3000 **Effects of Partial Hepatectomy on Transplanted Hepatocytes.** R. L. Jirtle and G. Michalopoulos.
- \*3005 **5-Fluorouracil Incorporation in DNA of Human Breast Carcinoma Cells.** P. P. Major, E. Egan, D. Herrick, and D. W. Kufe.
- 3010 **Chemical Quantification of Unscheduled DNA Synthesis in Cultured Hepatocytes as an Assay for the Rapid Screening of Potential Chemical Carcinogens.** Felix R. Althaus, Susan D. Lawrence, Gerald L. Sattler, David G. Longfellow, and Henry C. Pitot.
- 3016 **Comparison of the Mutagenicity and Teratogenicity of Cyclophosphamide and Its Active Metabolites, 4-Hydroxycyclophosphamide, Phosphoramidate Mustard, and Acrolein.** Barbara F. Hales.
- \*3022 **Characterization of an Amino Acid Fucoside of Normal and SV40-transformed Human Embryonic Lung Cells.** Phillip A. Morton, Martin M. Klinger, and Sheldon M. Steiner.
- 3028 **Toxicity of Diethylaminoreserpine to a Transplantable Tumor: The Significance of the Presence of Hypoxic Cells.** Shirley Lehnert.
- 3033 **Purification and Some Properties of a Deoxyribonucleoside Kinase from L1210 Cells.** Chi-Hsiung Chang, R. Wallace Brockman, and L. Lee Bennett, Jr.
- 3040 **Morphological and Neoplastic Transformation of Syrian Hamster Embryo Fibroblasts by Diethylstilbestrol and Its Analogs.** John A. McLachlan, Annette Wong, Gisela H. Degen, and J. Carl Barrett.
- \*3046 **An Essential Role for Polyamine Biosynthesis during Human Granulopoietic Differentiation.** Dharmvir S. Verma and Prasad S. Sunkara.
- 3050 **Induction of Retrovirus Gene Expression in Mouse Cells by Some Chemical Mutagens.** Raymond W. Tennant, James A. Otten, Fred E. Myer, and Ralph J. Rascati.
- 3056 **Dietary Influence of Tyrosine and Phenylalanine on the Response of B16 Melanoma to Carbidopa-Levodopa Methyl Ester Chemotherapy.** Gary G. Meadows, Herbert F. Pierson, Rokia M. Abdallah, and Pankaj R. Desai.
- 3064 **Effects of Phorbol Myristate Acetate and a Lymphokine on Cyclic 3':5'-Guanosine Monophosphate Levels and Proliferation of Macrophages.** Elba M. Hadden, John R. Sadlik, Ronald G. Coffey, and John W. Hadden.
- \*3070 **Growth-inhibitory Effects of DL- $\alpha$ -Difluoromethylornithine in the Spectrum of Human Lung Carcinoma Cells in Culture.** Gordon D. Luk, Gregory Goodwin, Adi F. Gazdar, and Stephen B. Baylin.
- 3074 **Modification of the Sensitivity and Repair of Potentially Lethal Damage by Diethyldithiocarbamate during and following Exposure of Plateau-Phase Cultures of Mammalian Cells to Radiation and *cis*-Diamminedichloroplatinum(II).** Richard G. Evans, Carol Engel, Christine Wheatley, and James Nielson.

- 3079 **Cell Specificity in Hepatocarcinogenesis: Preferential Accumulation of *O*<sup>6</sup>-Methylguanine in Target Cell DNA during Continuous Exposure of Rats to 1,2-Dimethylhydrazine.** M. A. Bedell, J. G. Lewis, K. C. Billings, and J. A. Swenberg.
- \*3084 **Monoclonal Antibodies to Human Prostate and Bladder Tumor-associated Antigens.** James J. Starling, Susan M. Sieg, Mary L. Beckett, Paul F. Schellhammer, Leopoldo E. Ladaga, and George L. Wright, Jr.
- \*3090 **Methionine Dependency of Cell Growth in Normal and Malignant Hematopoietic Cells.** Yasuhiko Kano, Shinobu Sakamoto, Tadashi Kasahara, Kazuo Kusumoto, Keita Hida, Keiichi Suda, Keiya Ozawa, Yasusada Miura, and Fumimaro Takaku.
- 3093 **Phorbol Diester and Epidermal Growth Factor Receptors in 12-*O*-Tetradecanoylphorbol-13-acetate-resistant and -sensitive Mouse Epidermal Cells.** N. H. Colburn, T. D. Gindhart, G. A. Hegamyer, P. M. Blumberg, K. B. Delclos, B. E. Magun, and J. Lockyer.
- 3098 **Deacylation of 12-*O*-[<sup>3</sup>H]Tetradecanoylphorbol-13-acetate and [<sup>3</sup>H]Phorbol-12,13-didecanoate in Hamster Skin and Hamster Cells in Culture.** J. Carl Barrett, M. Todd Brown, and Enid E. Sisskin.
- 3102 **Formation of the Cross-Link 1-[*N*<sup>3</sup>-Deoxycytidyl],2-[*N*<sup>1</sup>-deoxyguanosinyl]ethane in DNA Treated with *N,N'*-Bis(2-chloroethyl)-*N*-nitrosourea.** William P. Tong, Marion C. Kirk, and David B. Ludlum.
- 3106 **Defective Removal of DNA Cross-Links in a Repair-deficient Mutant of Chinese Hamster Cells.** Raymond E. Meyn, Susan F. Jenkins, and Larry H. Thompson.
- \*3111 **Growth Characteristics of Human Colonic Adenocarcinomas Propagated in the Rowett Athymic Rat.** James J. Stragand, Benjamin Drewinko, Sheri D. Henderson, Bruce Grossie, L. Clifton Stephens, Barthel Barlogie, and Jose M. Trujillo.
- 3116 **Effect of Glucagon on Amino Acid Transport and Cyclic Adenosine 3':5'-Monophosphate Production in Rat Hepatoma Cell Line McA-RH 8994 in Culture.** Darshan S. Kelley.
- 3120 **Quantitation of Aflatoxin B<sub>1</sub>-modified DNA Using Monoclonal Antibodies.** John D. Groopman, Aage Haugen, Glenn R. Goodrich, Gerald N. Wogan, and Curtis C. Harris.
- 3125 **Quantitative Analysis of the Cytokinetic Response of KHT Tumors *in Vivo* to 1-β-D-Arabinofuranosylcytosine.** M. G. Pallavicini, J. W. Gray, and L. J. Folstad.
- 3132 **A Qualitative and Quantitative Assay for Cells Lacking Postconfluence Inhibition of Cell Division: Characterization of This Phenotype in Carcinogen-treated Syrian Hamster Embryo Cells in Culture.** Shuji Nakano, Sarah A. Bruce, Hiroaki Ueo, and Paul O. P. Ts'o.
- 3138 **Thymic Origin of the Prolactin-dependent Nb2 Lymphoma Cell Line.** William H. Fleming, Norman M. Pettigrew, Robert J. Matusik, and Henry G. Friesen.
- \*3142 **Mouse Monoclonal Antibody to a Melanoma-Carcinoma-associated Antigen Synthesized by a Human Melanoma Cell Line Propagated in Serum-free Medium.** Darwin O. Chee, Robert H. Yonemoto, Stanley P. L. Leong, Gil F. Richards, Vivian R. Smith, Joan L. Klotz, Ronald M. Goto, Ronald L. Gascon, and Mary M. Drushella.
- 3148 **Unusual Androgen Sensitivity of the Androgen-independent Dunning R-3327-G Rat Prostatic Adenocarcinoma: Androgen Effect on Tumor Cell Loss.** John E. Humphries and John T. Isaacs.
- 3157 **Development of a New Melanoma Model in C57BL/6 Mice.** Jane Berkelhammer, Ronald W. Oxenhandler, Reuel R. Hook, Jr., and Jill M. Hennessy.
- 3164 **Antigenic Changes in Nonhistone Proteins during Azo Dye Hepatocarcinogenesis.** Warren N. Schmidt, Brian J. Gronert, David L. Page, Robert C. Briggs, and Lubomir S. Hnilica.
- \*3175 ***In Vitro* Growth Promotion in Human Malignant Melanoma Cells by Fibroblast Growth Factor.** Ann Richmond, David H. Lawson, Daniel W. Nixon, J. Stedman Stevens, and Rajender K. Chawla.
- 3181 **Esophageal and Hepatic Microsomal Metabolism of *N*-Nitrosomethylbenzylamine and *N*-Nitrosodimethylamine in the Rat.** George E. Labuc and Michael C. Archer.
- \*3187 **Monoclonal Antibodies to Human Lung Tumor Antigens Demonstrated by Immunofluorescence and Immunoprecipitation.** Bluma G. Brenner, Serge Jothy, Joseph Shuster, and Abraham Fuks.
- 3193 **Effect of Sodium *cis*-β-4-Methoxybenzoyl-β-bromacrylate (Cytembena) on HeLa Cell Kinetics.** Xavier Ronot, Monique Adolphe, Dominique Kuch, Patrick Jaffray, Paul Lechat, and Guy Deysson.
- 3196 **Enhanced Susceptibility of Glutaraldehyde-treated Tumor Cells to Antibody-dependent Macrophage-mediated Cytolysis.** Nobuko Iwata-Dohi, Mariko Esumi-Kurisu, Michihiro Ikenami, Keiko Sadatsune, Den'ichi Mizuno, and Masatoshi Yamazaki.
- 3201 **Species-specific Activation of Phenacetin into Bacterial Mutagens by Hamster Liver Enzymes and Identification of *N*-Hydroxyphenacetin *O*-Glucuronide as a Promutagen in the Urine.** Anne-Marie Camus, Marlin Friesen, Alain Croisy, and Helmut Bartsch.
- \*3209 **Mechanism of Stimulation by Human Interferon of Prostaglandin Synthesis in Human Cell Lines.** Akira Fuse, Ishtiaq Mahmud, and Tsuguo Kuwata.
- 3215 **Suppression of Cell-mediated Antitumor Immunity by Complete Freund's Adjuvant.** Shohei Koyama, Takayuki Yoshioka, and Takao Sakita.

**3220 Clonal Growth of Carcinogen-induced Enzyme-deficient Preneoplastic Cell Populations in Mouse Liver.** H. M. Rabes, Th. Bücher, A. Hartmann, I. Linke, and M. Dünwald.

**3228 *Communication:* Increased Amounts of Double-Stranded RNA in the Cytoplasm of Rat Liver following Treatment with Carcinogens.** Gary A. Clawson and Edward A. Smuckler.

#### **CLINICAL INVESTIGATIONS**

**3232 Endogenous Hormones as a Major Factor in Human Cancer.** Brian E. Henderson, Ronald K. Ross, Malcolm C. Pike, and John T. Casagrande.

**3240 Sister Chromatid Exchange and Growth Kinetics in Chronic Myeloid Leukemia.** Claude Stoll, Francis Oberling, and Marie-Paule Roth.

**3244 Placental Alkaline Phosphatase as a Tumor Marker for Seminoma.** Paul H. Lange, Jose L. Millan, Torgny Stigbrand, Robert L. Vessella, Erkki Ruoslahti, and William H. Fishman.

**3248 Further Evidence for the Use of Polyamines as Biochemical Markers for Malignant Tumors.** Yoav Horn, Stuart L. Beal, Natalio Walach, Warren P. Lubich, Lina Spigel, and Laurence J. Marton.

**3252 Organ Site Specificity for Cancer in Chromosomal Instability Disorders.** Andrew P. Feinberg and Donald S. Coffey.

**3255 Special Announcements**

**3258 Announcements**

**3259 Errata**

**3260 Author Index**

# Cancer Research

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

## 42 (8)

*Cancer Res* 1982;42:2963-3259.

**Updated version** Access the most recent version of this article at:  
<http://cancerres.aacrjournals.org/content/42/8.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/42/8.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.