Contents

Asterisks preceding page numbers refer to human studies.

2117 Benjamin Rush on Cancer. Michael B. Shimkin.

2119 Effect of Combination Treatment with Cyclophosphamide and Nonspecific Passive Immunization on a Transplantable Tumor in WKA Rats. Elki Gotohda, Tsugumichi Kawamura, Fujio Sendo, Masayuki Nakayama, Jitsuo Akiyama, Tsuneyuki Oikawa, Masuo Hosokawa, Takao Kodama, and Hiroshi Kobayashi.


2162 Effects of Insulin, Prolactin, Progesterone, and Estradiol on DNA Synthesis in Organ Culture of 7,12-Dimethylbenz(a)anthracene-induced Rat Mammary Tumors. Jean-Lambert Pasteels, Jean-Claude Heuson, Jeanine Heuson-Stiennon, and Nicole Legros.

2171 Differential Mechanisms of Increased $\alpha_1$-Fetoprotein Production in Rats following Carbon Tetachloride Injury and Partial Hepatectomy. Akiharu Watanabe, Masahiro Miyazaki, and Kazuhsa Takenaka.


2194 Fine Structural Changes in Hepatocytes after Simultaneous Treatment with Single Doses of 3'-Methyl-4-dimethylaminoazobenzene and Cycloheximide. Bojan Flaks and Eng-Chuan Teh.


2210 Relationship between Nucleolar Microspherule Formation by Urethan and Inhibition of RNA and Protein Synthesis. Luciano Lombardi.

2216 Two Forms of Thymidine Kinase in Normal and Tumor Tissues of Animals. Mochihiko Ohashi and Takahiko Taguchi.

2223 Importance of Mammary Gland DNA Synthesis on Carcinogen-induced Mammary Tumorigenesis in
2227 Reversibility and Irreversibility of Liver Tumors in Mice Induced by the α Isomer of 1,2,3,4,5,6-Hexachlorocyclohexane. Nobuyuki Ito, Motoo Hananouchi, Seiichi Sugihara, Tomoyuki Shirai, Hiroyuki Tsuda, Shoji Fukushima, and Hiroshi Nagasaki.

2235 Karyotypes of Vasofromative Sarcomas Arising from BALB/3T3 Cells Attached to Polycarbonate Plates. Michihiro C. Yoshida, Motomicchi Sasaki, Noritoshi Takeichi, and Charles W. Boone.

2241 Correlation of Antitumor Chemoinmunotherapy with Bone Marrow Macrophage Precursor Cell Stimulation and Macrophage Cytotoxicity. Bernard Fisher and Norman Wolmark.


2254 Two-Stage Chemical Oncogenesis in Cultures of C3H/10T1/2 Cells. Sukdeb Mondal, David W. Brankow, and Charles Heidelberger.

2261 Heterotopic Urinary Bladder with a Communicating Reservoir. Ryoichi Oyasu, David J. Manning, Michio Matsumoto, and Martin L. Hopp.


2274 Kinetic Properties of Alcohol Dehydrogenase in Hepatocellular Carcinoma and Normal Tissues of Rat. Arthur I. Cederbaum and Emanuel Rubin.


2302 The Effect of a Growing Tumor and Its Removal on the Cytotoxicity of Macrophages from Cultured Bone Marrow Cells. Bernard Fisher, Norman Wolmark, Jean Coyle, and Elizabeth A. Saffer.

2306 Comparison of the Products of the Reaction of 7-Methylbenz[a]anthracene 5,6-Oxide and RNA, with Those Formed in 7-Methylbenz[a]anthracene-treated Cells. William M. Baird, Philip L. Grover, Peter Sims, and Peter Brookes.

2312 Differences between Pyrimidine Nucleoside Monophosphate Kinase from Rat Novikoff Ascites Hepatoma and Rat Liver. Patricia F. Maness and Antonio Orenge.


2326 Identification of Singlet Oxygen as the Cytotoxic Agent in Photoinactivation of a Murine Tumor. Kenneth R. Weishaupt, Charles J. Gomer, and Thomas J. Dougherty.


2340 Distribution and Disposition of Platinum following Intravenous Administration of cis-Diaminedichloroplatinum(II) (NSC 119875) to Dogs. Charles L. Litterst, Theodore E. Gram, Robert L. Dedrick, Andre F. Leroy, and Anthony M. Guarino.

2345 The Significance of DNA Damage in the Cell Cycle Sensitivity of Chinese Hamster Ovary Cells to Bleomycin. Judith M. Clarkson and Ronald M. Humphrey.

2350 Hepatic Metabolism of N-Hydroxy-5-methyl-4-aminooazobenzene and Other N-Hydroxyarylamines to Reactive Sulfuric Acid Esters. Fred F. Kadiubar, James A. Miller, and Elizabeth C. Miller.


2365 Pathology of Lymphosarcoma in Sheep Induced with Bovine Leukemia Virus. Carl Olson and Lois E. Baumgarten.

2382 Effect of 6-Hydroxydopamine on Tumor Growth. Ewa Chelmicka-Szorc and Barry G. W. Arnason.

2385 Alteration of Mammalian Cells by Interaction with Artificial Lipid Vesicles. June K. Dunnick, James D. Rooke, Sergio Aragon, and Joseph P. Kriss.

2390 Inhibition of Mammalian and Oncornavirus Nucleic Acid Polymerase Activities by Alkoxylbenzopentanthridine Alkaloids. V. Sagar Sethi.


2408 Transient Inhibition of Cell Proliferation in Rat Glioma Monolayer Cultures by Cortisol. Robert J. Grasso.

2415 Estimation of Tumor Growth Fraction in Murine Tumors by the Primer-available DNA-dependent DNA Polymerase Assay. Lewis M. Schiffer, Arnold M. Markoe, and Janet S. R. Nelson.

2419 Covalent Interaction of Metabolites of the Carcinogen Trichloroethylene in Rat Hepatic Microsomes. Benjamin L. Van Duuren and Sipra Banerjee.


*2436 Erythrocyte Receptors and Thymus-associated Antigens on Human Thymocytes, Mitogen-induced Blasts, and Acute Leukemia Blasts. Luisa Sen, Bonnie Mills, and Luis Borella.

2442 Elevation of Dihydrofolate Reductase, Thymidylate Synthetase, and Thymidine Kinase in Cultured Mammalian Cells after Exposure to Folate Antagonists. Paul L. Chello, Charlene A. McQueen, Lisa M. DeAngelis, and Joseph R. Bertino.


2455 Letters to the Editor:


2459 In Vitro Detection of Nitrosamines and Other Indirect Alkylating Agents by Reaction with 3,4-Dichlorothiophenol in the Presence of Rat Liver Microsomes. Rudolf Preussmann, Kusum N. Arjungi, and Georg Ebers.

2463 Announcement from the Editor.

2464 Announcements.

2466 Errata.