## Contents

Asterisks preceding page numbers refer to human studies.

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2117</td>
<td>Benjamin Rush on Cancer.</td>
<td>Michael B. Shimkin</td>
</tr>
<tr>
<td>2119</td>
<td>Effect of Combination Treatment with Cyclophosphamide and Nonspecific Passive Immunization on a Transplantable Tumor in WKA Rats.</td>
<td>Elki Gotohda, Tsugumichi Kawamura, Fujio Sendo, Masayuki Nakayama, Jitsuo Akiyama, Tsuneyuki Okawa, Masuo Hosokawa, Takao Kodama, and Hiroshi Kobayashi.</td>
</tr>
<tr>
<td>2162</td>
<td>Effects of Insulin, Prolactin, Progesterone, and Estradiol on DNA Synthesis in Organ Culture of 7,12-Dimethylbenz(a)anthracene-induced Rat Mammary Tumors.</td>
<td>Jean-Lambert Pasteels, Jean-Claude Heuson, Jeanine Heuson-Stiennnon, and Nicole Legros.</td>
</tr>
<tr>
<td>2194</td>
<td>Fine Structural Changes in Hepatocytes after Simultaneous Treatment with Single Doses of 3'-Methyl-4-dimethylaminoazobenzene and Cycloheximide.</td>
<td>Bojan Flaks and Eng-Chuan Teh.</td>
</tr>
<tr>
<td>2210</td>
<td>Relationship between Nucleolar Microsphere Formation by Urethan and Inhibition of RNA and Protein Synthesis.</td>
<td>Luciano Lombardi.</td>
</tr>
<tr>
<td>2216</td>
<td>Two Forms of Thymidine Kinase in Normal and Tumor Tissues of Animals.</td>
<td>Mochihiko Ohashi and Takahiko Taguchi.</td>
</tr>
<tr>
<td>2223</td>
<td>Importance of Mammary Gland DNA Synthesis on Carcinogen-induced Mammary Tumorigenesis in</td>
<td></td>
</tr>
</tbody>
</table>
Rats. Hiroshi Nagasawa, Reiko Yanai, and Hisashi Taniguchi.

Reversibility and Irreversibility of Liver Tumors in Mice Induced by the α Isomer of 1,2,3,4,5,6-Hexachlorocyclohexane. Nobuyuki Ito, Motoo Hana-nouchi, Seiichi Sugihara, Tomoyuki Shirai, Hiroyuki Tsuda, Shoji Fukushina, and Hiroshi Nagasaki.

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

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


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

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


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


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.

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.

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


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


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

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


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

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

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

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


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

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.

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


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.


Letters to the Editor:


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

Announcement from the Editor.

Announcements.

Errata.