Contents

Asterisks preceding the title refer to studies in humans.

1977  Riboflavin and Cancer: A Review.
  Richard S. Rivlin.

1987  An Experimental Screening for "Systemic Adjuvants of Immunity" Applicable in Cancer Immunotherapy.
  George Mathé, Moaména Kamel, Manoucher Dezfulian, Olga Halle-Pannenko, and Charlotte Bourut.

1998  Filamentous Forms of Enveloped A Particles in Cell Cultures from Chemically Induced Rat Hepatomas.
  Jan Marc Orenstein and I. Bernard Weinstein.

2005  3-(Tetraacetyl Glucopyranos-2-yl)-l-(2-chloro-ethyl)-l-nitrosourea, an Antitumor Agent with Modified Bone Marrow Toxicity.
  Philip S. Schein, Mary G. McMenamin, and Tom Anderson.

2010  The Principal Liver Carcinogen-Protein Conjugate after a Single Dose of Hepatic Azocarcinogen.
  Sam Sorof and Emily M. Young.

2014  Schedule-dependent Therapeutic Synergism for L-Asparaginase and Methotrexate in Leukemic (L5178Y) Mice.

2020  * Asparaginase in Combination Chemotherapy for Remission Induction of Childhood Acute Lymphocytic Leukemia.

2026  Growth Characteristics of Burkitt Somatic Cell Hybrids in Vitro.

2030  * Immunological Reaction in Keratoacanthoma, a Spontaneously Resolving Skin Tumor.

2034  Enzymatic and Immunological Studies on Pyruvate Carboxylase in Livers and Liver Tumors.
  Lillie O. Chang and Harold P. Morris.

2042  * Stable Chromosome Changes in a Human Malignant Melanoma.
  T. R. Chen and Margery P. Morris.

2048  * Bactericidal and Bacteriolytic Activity of Leukemic Sera.
  Waldemar Pruzanski, Wolf-Dietrich Leers, and Alastair C. Wardlaw.

2054  * Studies on Certain Cytoplasmic Enzymes and Specific Estrogen Receptors in Human Breast Cancer and in Nonmalignant Diseases of the Breast.

2063  The Isolation and Characterization of Gallium-binding Granules from Soft Tissue Tumors.

2068  Immunosuppression and Malignant Lymphomas in Graft-versus-Host Reactions.
  Catherine Solnik, Helga Gleichmann, Maureen Kavanah, and Robert S. Schwartz.

2078  Immune Capacity and Response to Antigenic Tumors.
  Robert J. Risdall, John C. Aust, and Charles F. McKhann.

2086  Protective Effects of Cycloheximide against 1-β-D-Arabinosylcytosine-induced Intestinal Lesions.
  Robert S. Verbin, Gloria Diluiso, and Emmanuel Farber.

2094  Formation of a Carcinogen of Natural Origin in the Etiology of Ultraviolet Light-induced Carcinogenesis.
  Homer S. Black and David R. Douglas.

2097  Deoxyribonucleoside Incorporation during DNA Repair of Carcinogen-induced Damage in Human Diploid Fibroblasts.
  Michael W. Lieberman and Miriam C. Poirier.

2104  Inhibition by N⁶, O⁴'-Dibutyril 3',5'-Cyclic Adenosine Monophosphate of Phosphate Transport and Metabolism in BHK₂¹, C₁₃, and BHK₂¹ Py Cells.
  C. Blat, N. Boix, and L. Harel.

2109  Folate Deficiency in Rats Bearing the Walker Tumor 256 and the Novikoff Hepatoma.
  Lionel A. Poirier.

2114  A Method for Measuring DNA Damage and Repair in the Liver in Vivo.
  Ray Cox, Ivan Damjanov, S. E. Abanobi, and D. S. R. Sarma.

2122  Patterns of Damage and Repair of Liver DNA Induced by Carcinogenic Methylating Agents in Vivo.
  Ivan Damjanov, Ray Cox, D. S. R. Sarma, and Emmanuel Farber.

2129  Mechanism of the Inhibition of DNA Biosynthesis by 4, 4'-Diacetyldiphenyleurea-bis(guanyl-
hydrazone) in Leukemia L1210 Cells.
C. Dave, J. Ehrke, and E. Mihich.

2135 A Comparative Study of the Interaction between Concanavalin A and Mitochondria from Normal and Malignant Cells.

Jean Joncas, Jocelyne Boucher, Armand Boudreault, and Maryse Granger-Julien.

2149 The Effect of Urethan on the Incorporation of Thymidine-3H into DNA and the Activities of Some Enzymes Required for DNA Biosynthesis in Rat Regenerating Liver.
Kou M. Hwang, Sandra A. Murphree, and Alan C. Sartorelli.

2156 Nuclear Magnetic Resonance Studies of Several Experimental and Human Malignant Tumors.
Donald P. Hol!is, James S. Economou, Leon C. Parks, Joseph C. Eggleston, Leon A. Saryan, and Jeffrey L. Czeisler.

2161 Decrease in Oncogenic Potential of L1210
Leukemia by Triazenes.
Franz A. Schmid and Dorris J. Hutchison.

2166 Dose-Response Studies with a Pure Tumor-promoting Agent, Phorbol Myristate Acetate.
B. L. Van Duuren, A. Sivak, A. Segal, I. Seidman, and C. Katz.

2173 Antitumor Activity of Silica Gel F 254 Eluate.
Erik De Clercq.

2181 Epidermal Antigens in Experimental Keratoacanthoma and Squamous Cell Carcinoma.
H. K. Muller and G. R. Flannery.

2187 Protective Effect of Delipidated Mycobacterial Cells and Purified Cell Walls against Ehrlich Carcinoma and a Syngeneic Lymphoid Leukemia in Mice.

2196 Thymic Changes in the Magnesium-depleted Rat.

2205 Special Announcement: Annual Meeting of the American Association for Cancer Research, Inc.

2206 Announcements.

2207 Erratum.

COVER LEGEND

German pharmacologist Hermann Druckrey (b. 1904) received his education in Giessen, Heidelberg, and Leipzig. In 1942, he became professor of pharmacology and toxicology at the University of Berlin, and by 1965, he became Director of Forschergruppe Praeventivmedizin, a foundation of Deutsche Forschungsgemeinschaft, occupying the building at Stefan-Meier Strasse 8, Freiburg (illustrated).

Professor Druckrey has devoted his career to research in cancer biochemistry, chemotherapy, and carcinogenesis. His systematic studies on the relationships between chemical structure, dose, time, route of administration, and the condition of the host have been especially fruitful with N-nitroso compounds, hydrazo-, azo-, and azoxyalkanes, and triazenes. He and his co-workers recorded their important findings in a long series of papers during the 1960's in Naturwissenschaften and in Zeitschrift für Krebsforschung (e.g., H. Druckrey, R. Preussmann, S. Ivanovic, and D. Schmähl. Organotrope carcinogene Wirkungen bei 65 verschiedenen N-Nitroso-Verbindungen an BD Ratten. Z. Krebsforsch., 69: 103–201, 1967).

Three neoplastic effects are illustrated: brain glioma in rat following single transplacental dose of ethylnitrosourea (top); gastric adenocarcinoma in guinea pig fed methylnitrosourethan (center); and colonic multiple adenocarcinoma in rat given injections s.c. of azoxy-methane (bottom).

Nitrosamine carcinogenesis gained significance when it was shown that such compounds occur in foods and in cigarette smoke, and that they were formed in food in the presence of nitrites (cf. Lancet, 1: 1071–1072, 1968). These compounds are among candidates as environmental carcinogens in human cancer, especially of the gastrointestinal tract.

We are indebted to Professor Druckrey for the portrait, taken in 1965, and the illustrations and hope that his fruitful years of experimental work, which ended in 1972, are now replaced by an equally gratifying retirement.
Cancer Research

33 (9)


Updated version
Access the most recent version of this article at:
http://cancerres.aacrjournals.org/content/33/9.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, contact the AACR Publications Department at permissions@aacr.org.