Contents

Perspectives in Cancer Research

6019 Chromosome Translocations and Human Cancer. Carlo M. Croce.

BASIC SCIENCES

6024 DNA Damage in Cultured L1210 Cells by 2-Haloethyl Esters of (Methylsulfonyl)methanesulfonic Acid. Jo Ann Alexander, Bonnie J. Bowdon and Glynn P. Wheeler.

*6029 Detection of Activated M Chart 2,000 Protein the Product of ras Oncogenes, Using Antibodies with Specificity for Amino Acid 12. Gail Wong, Norman Arnheim, Robin Clark, Peter McCabe, Michael Innis, Lois Aldwin, Danute Nitecki and Frank McCormick.


6054 Two Mechanisms of Synergism When Amphotericin B Is Used in Combination with Actinomycin D or 1-(2-Chloroethyl)-3-cyclopentyl-1-nitrosourea against the Human Promyelocytic Leukemia Cell Line HL-60. Aline Vertut-Croquin, Janina Brajzburg and Gerald Medoff.

6059 Role of Intracellular Calcium Ion in Human Promyelocytic Leukemia HL-60 Cell Differentiation. Toshiro Okazaki, Toshhiro Mochizuki, Masaro Tashima, Hiroyoshi Sawada and Haruto Uchino.


6068 Changes in Antigen Expression on Human FME Melanoma Cells after Exposure to Photoactivated Hematoporphyrin Derivative. Catharina de Lange Davies, Andre Western, Tore Lindmo and Johan Moan.


6078 Changes in Isoenzyme Profiles during Induction of Differentiation in Human Myelomonocytic Leukemia Cell Lines. Hans G. Drexler, Kazuyuki Otsuka, Gerhard Gaedicke and Jun Minowada.

6083 Potentiation of Lymphocyte Responses by Monoclonal Antibodies to the Ganglioside GM1. Peter Hersey, Stephen D. Schibeci, Phillip Townsend, Christine Burns and David A. Cheresh.


6101 Pharmacokinetics of Intraventricular and Intravenous N,N',N"-Triethylenethiophosphoramid (Thiotepa) in Rhesus Monkeys and Humans. John M. Strong, Jerry M. Collins, Cynthia Lester and David G. Poplack.


6131 Metastatic Potential and Spontaneous Mutation Rates: Studies with Two Murine Cell Lines and Their Recently Induced Metastatic Variants. Wayne S. Kendal and Philip Frost.

6136 Increase in Human Exposure to Methylamine Precursors of N-Nitrosamines after Eating Fish. Steven H. Zeisel and Kerry-Ann DeCosta.

6139 Inhibition of Human DNA Polymerase α by α,—Antichymotrypsin. Michio Tsuda, Masashi Masuyama and Tsunehiko Katsunuma.

6143 Characterization of the CA 125 Antigen Associated with Human Epithelial Ovarian Carcinomas. H. M. Davis, V. R. Zurawski, Jr., R. C. Bast, Jr., and T. L. Klug.

6149 Involvement of Protein Kinase C Activation in Ornithine Decarboxylase Gene Expression in Primary Culture of Newborn Mouse Epidermal Cells and in Skin Tumor Promotion by 12-O-Tetradecanoylphorbol-13-acetate. Ajit K. Verma, Rey-Chen Pong and Deborah Erickson.


6160 Effect of Sodium Phenobarbital and Sodium Saccharin in AIN-76A Diet on Carcinogenesis Initiated with N-(4-(5-Nitro-2-furyl))-2-thiazoylformamide and N,N-DibutylNitrosamine in Male F344 Rats. Katsumi Imaida and Ching Yung Wang.

† The CONTENTS arranged by Subject Category can be found immediately following these CONTENTS.

Downloaded from cancerres.aacrjournals.org on April 14, 2017. © 1986 American Association for Cancer Research.


Alteration of Fluorouracil Metabolism in Human Colon Cancer Cells by Dipyridamole with a Selective Increase in Fluorodeoxyuridine Monophosphate Levels. Jean L. Grem and Paul H. Fischer.


2',5'-Oligoadenylate Synthetase Activity in Human Mammary Tumors and Its Potential Correlation with Tumor Growth or Hormonal Responsiveness. Dai Kee Liu, Gail F. Owens and Peter D. Feil.


Experimental Radioimmunotherapy of Murine Lymphoma with 111I-labeled Anti-T Cell Antibodies. Christopher C. Badger, Kenneth A. Krohn, Howard Shulman, Nancy Flournoy and Irwin D. Bernstein.


Effect of Inhibitors of Ornithine Decarboxylase on Retrovirus Induced Transformation of Murine Erythroid Precursors in Vitro. S. Peter Klinken, Manuel J. Castilla and Snorri S. Thorgerisson.


Metabolism of Nitromiphene (CI 628) in the Immature Female Rat: Role of Gastrointestinal Microflora in the Biotransformation of a Triarylethylene Antiestrogen. Peter C. Ruenitz and Jerome R. Bagley.

Inhibition of Dimethyl Sulfoxide Induced Erythropoietic Differentiation of Murine Erythroleukemia Cells in Culture. Magda Foresti, Luciano Gaudio, Giuseppe Geraci and Paola Manduca.

Enhanced Inhibition of Colony Formation of Human Renal Cell Carcinoma in Soft Agar by the Combination of α-Difluoromethylornithine and Recombinant γ-Interferon. Kazuo Golhi, Shin-ichi Murao, Sakan Maeda, Taketoshi Sugiyama and Sadao Kamidono.


Comparison and Characterization of Growth Inhibition in L1210 Cells by α-Difluoromethylornithine, an Inhibitor of Ornithine Decarboxylase, and Nβ,Nβ′-Bis(ethyl)spermidine, an Apparent Regulator of the Enzyme. Carl W. Porter, Barbara Ganis, Tim Vinson, Laurence J. Marton, Debora L. Kramer and Raymond J. Bergeron.

Modulation of Thiouracil Cytotoxicity in the HL-60 Cell Line by Physiological Concentrations of Hypoxanthine. Solomon Zimm, Gloria E. Johnson and David G. Poplack.


Continued


Heritable Variation in Expression of Multiple Tumor Associated Epitopes on a High Molecular Weight Mucin-like Antigen. Peter S. Linsley, Vincent Ochs, Diane Horn, David B. Ring and Arthur E. Frankel.

A New Concept for Macromolecular Therapeutics in Cancer Chemotherapy: Mechanism of Tumorotropic Accumulation of Proteins and the Antitumor Agent Symanc. Yasuhiro Matsumura and Hiroshi Maeda.

Monoclonal Antibodies against Cell-Surface Antigens of the Metastatic Rat 13762NF Mammary Adenocarcinoma and Their Cross-Reactivity with Human Breast Carcinomas. Susan M. North, Peter A. Steck and Garth L. Nicolson.


Enhancement by γ-Interferon of in Vivo Tumor Radiolocalization by a Monoclonal Antibody against HLA-DR Antigen. Gail Rowinson, Frances Balkwill, Deborah Snook, George Hooker and Agamemnon A. Epenetos.

Ability of Inhibitors of Glycosylation and Protein Synthesis to Sensitize Cells to Abrin, Ricin, Shigella Toxin, and Pseudomonas Toxin. Kirsten Sandvig, Tor Inge Tønnessen and Sjur Olsses.

Induction of Prostate Carcinoma in Situ at High Incidence in F344 Rats by a Combination of 3,2'-Dimethyl-4-aminothiphenyl and Ethilin Estradiol. Tomoyuki Shirai, Shoji Fukushima, Etsuo Ikawa, Yoshiaki Tagawa and Nobuyuki Ito.

Microinjection of the ras Oncogene Protein into Nonestablised Rat Embryo Fibroblasts. Neil F. Sullivan, Raymond W. Sweet, Martin Rosenberg and James R. Feramisco.

In Vitro Transformation of Primary Rat Tracheal Epithelial Cells by 5-Azacytidine. Cheryl Walker and Paul Nettesheim.

Collagenase and Elastase Production by Mouse Mammary Adenocarcinoma Primary Cultures and Cloned Cells. Maria Zeydel, Sachiko Nakagawa, Luis Biempica and Shizuko Takahashi.


CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS


Incorporation of Iodosulfouridine into DNA of Granulocytes in Patients. Karl Belanger, Raymond W. Klecker, Jr., Jan Rowland, Timothy J. Kinsella and Jerry M. Collins.


Continued
Beginning January 1987, Cancer Research will be published twice a month. Issues will be numbered from 1 through 24 and dated the 1st and 15th day of each month. All of the subject categories covered by the journal will be represented in every issue.

NOTE: Advance registration form for 78th Annual Meeting of the American Association for Cancer Research available in the back of this issue.
Cancer Research
VOLUME 46 • NUMBER 12

CONTENTS Arranged by Subject Category

Perspectives in Cancer Research
6019 Chromosome Translocations and Human Cancer. Carlo M. Croce.

BASIC SCIENCES
Biochemistry and Biophysics
6054 Two Mechanisms of Synergism When Amphoter cin B Is Used in Combination with Actinomycin D or 1-(2-Chloroethyl)-3-cyclohexyl-l-nitrosourea against the Human Promyelocytic Leukemia Cell Line HL-60. Aline Vertut-Croquin, Janina Brajtburg and Gerald Medoff.
6068 Changes in Antigen Expression on Human FME Melanoma Cells after Exposure to Photoactivated Hematoporphyrin Derivative. Catharina de Lange Davies, Andre Western, Tore Lindmo and Johan Moan.
6139 Inhibition of Human DNA Polymerase α by α1-Antichymotrypsin. Michio Tsuda, Masashi Masuyama and Tsune hiko Katsumura.
6143 Characterization of the CA 125 Antigen Associated with Human Epithelial Ovarian Carcinomas. H. M. Davis, V. R. Zurawski, Jr., R. C. Bast, Jr., and T. L. Klug.
6207 2',5'-Oligoadenylate Synthetase Activity in Human Mammary Tumors and Its Potential Correlation with Tumor Growth or Hormonal Responsiveness. Dai Kee Liu, Gail F. Owens and Peter D. Feil.
6255 Metabolism of Nitromiphene (CI 628) in the Immature Female Rat: Role of Gastrointestinal Microflora in the Biotransformation of a Triarylethylene Antiestrogen. Peter C. Ruenitz and Jerome R. Bagley.
6418 Ability of Inhibitors of Glycosylation and Protein Synthesis to Sensitize Cells to Abrin, Ricin, Shigella Toxin, and Pseudomonas Toxin. Kirsten Sandvig, Tor Inge Tøn nessen and Sjur Olsnes.
6438 Collagenase and Elastase Production by Mouse Mammary Adenocarcinoma Primary Cultures and Cloned Cells. Maria Zeydel, Sachiko Nakagawa, Luis Biempica and Shizuko Takahashi.

Biology
6059 Role of Intracellular Calcium Ion in Human Promyelocytic Leukemia HL-60 Cell Differentiation. Toshiro Okazaki, Toshihiro Mochizuki, Masaro Tashima, Hiroyoshi Sawada and Haruto Uchino.
6131 Metastatic Potential and Spontaneous Mutation Rates: Studies with Two Murine Cell Lines and Their Recently Induced Metastatic Variants. Wayne S. Kendall and Philip Frost.
6279 Comparison and Characterization of Growth Inhibition in L1210 Cells by α-Difluoromethylornithine, an Inhibitor of Ornithine Decarboxylase, and N6,N6-Bis(ethyl)spermidine, an Apparent Regulator of the Enzyme. Carl W. Porter, Barbara Ganis, Tim Vinson, Laurence J. Marton, Debra L. Kramer and Raymond J. Bergeron.
Heritable Variation in Expression of Multiple Tumor Associated Epitopes on a High Molecular Weight Mucin-like Antigen. Peter S. Linsley, Vincent Ochs, Diane Horn, David B. Ring and Arthur E. Frankel.


Carcinogenesis


Increase in Human Exposure to Methylamine Precursors of N-Nitrosamines after Eating Fish. Steven H. Zeisel and Kerry-Ann DaCosta.

Involvement of Protein Kinase C Activation in Ornithine Decarboxylase Gene Expression in Primary Culture of Newborn Mouse Epidermal Cells and in Skin Tumor Promotion by 12-O-Tetradecanoylphorbol-13-acetate. Ajit K. Verma, Rey-Chen Pong and Deborah Erickson.

Effect of Sodium Phenobarbital and Sodium Saccharin in AIN-76A Diet on Carcinogenesis Initiated with N-(4-Hydroxy-2-nitroso)hydroquinone and N,N-Dihexylnitrosamine in Male F344 Rats. Katsumi Imaida and Ching Yung Wang.

Inhibition of Functional Intercellular Communication as a Possible Short-Term Test to Detect Tumor-promoting Agents: Results with Nine Chemicals Tested by Dye Transfer Assay in Chinese Hamster V79 Cells. Marco J. Zeilmaker and Hiroshi Yamashita.


Effect of Inhibitors of Ornithine Decarboxylase on Retrovirus Induced Transformation of Murine Erythroid Precursors in Vitro. S. Peter Kinnen, Manuel J. Castilla and Sonnir S. Thorgerisson.


Induction of Prostate Carcinoma in Situ at High Incidence in F344 Rats by a Combination of 3,2'-Dimethyl-4-aminobiphenyl and Ethylol Estriolad. Tomoyuki Shirai, Shoji Fukushima, Etsuo Ikawa, Yoshiaki Tagawa and Nobuyuki Ito.

In Vitro Transformation of Primary Rat Tracheal Epithelial Cells by 5-Azacytidine. Cheryl Walker and Paul Nettesheim.

Endocrinology


Immunology

Potentiation of Lymphocyte Responses by Monoclonal Antibodies to the Ganglioside GD3. Peter Hersey, Stephen D. Schibeci, Phillip Townsend, Christine Burns and David A. Cheresh.


Monoclonal Antibodies against Cell-Surface Antigens of the Metastatic Rat 13762NF Mammary Adenocarcinoma and Their Cross-Reactivity with Human Breast Carcinomas. Susan M. North, Peter A. Steck and Garth L. Nicolson.

Enhancement by y-Interferon of in Vivo Tumor Radiolocalization by a Monoclonal Antibody against HLA-DR Antigen. Gail Rowlinson, Frances Balkwill, Deborah Snook, George Hooker and Agamemnon A. Epenetos.


Molecular Biology and Genetics

Detection of Activated M, 21,000 Protein, the Product of ras Oncogenes, Using Antibodies with Specificity for Amino Acid 12. Gail Wong, Norman Amreich, Robin Clark, Peter McCabe, Michael Innis, Lois Aldwin, Danute Nitecki and Frank McCormick.


Inhibition of Dimethyl Sulfoxide Induced Erythropoietic Differentiation of Murine Erythroleukemia Cells in Culture. Magda Foresti, Luciano Gaudio, Giuseppe Geraci and Paola Manduca.


6427 Microinjection of the ras Oncogene Protein into Nonestablished Rat Embryo Fibroblasts. Neil F. Sullivan, Raymond W. Sweet, Martin Rosenberg and James R. Feramisco.

Preclinical Pharmacology and Experimental Therapeutics

6024 DNA Damage in Cultured L1210 Cells by 2-Haloethyl Esters of (Methylsulfonyl)methanesulfonic Acid. Jo Ann Alexander, Bonnie J. Bowdon and Glynn P. Wheeler.

*6091 Comparison of the Effects of an Ornithine Decarboxylase Inhibitor on the Intestinal Epithelium and on Intestinal Tumors. Peter M. Tutton and David H. Barkla.

*6101 Pharmacokinetics of Intraventricular and Intravenous N,N',N"-Triethylenethiophosphoramide (Thiotepa) in Rhesus Monkeys and Humans. John M. Strong, Jerry M. Collins, Cynthia Lester and David G. Poplack.


6125 Effects of 7-R-O-Methylmorinolar (Menogaril) on L1210 Cell Progression in Vitro and in Vivo. Earl G. Adams and Bijoy K. Bhuyan.


*6191 Alteration of Fluorouracil Metabolism in Human Colon Cancer Cells by Dipyridamole with a Selective Increase in Fluorodeoxuridine Monophosphate Levels. Jean L. Grem and Paul H. Fischer.


*6264 Enhanced Inhibition of Colony Formation of Human Renal Cell Carcinoma in Soft Agar by the Combination of α-Difluoromethylornithine and Recombinant γ-Interferon. Kazuo Gohji, Shin-ichi Murao, Sakan Maeda, Taketoshi Sugiyama and Sadao Kamidono.


*6286 Modulation of Thiopurine Cytotoxicity in the HL-60 Cell Line by Physiological Concentrations of Hypoxanthine. Solomon Zimm, Gloria E. Johnson and David G. Poplack.

6387 A New Concept for Macromolecular Therapeutics in Cancer Chemotherapy: Mechanism of Tumorotropic Accumulation of Proteins and the Antitumor Agent Smancs. Yasuhiro Matsumura and Hiroshi Maeda.

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

Clinical


6509 Incorporation of Iododeoxyuridine into DNA of Granulocytes in Patients. Karl Belanger, Raymond W. Kleecker, Jr., Jan Rowland, Timothy J. Kinsella and Jerry M. Collins.


Continued
Epidemiological


6525 Announcements

6526 Erratum

6527 Acknowledgment to Reviewers

6536 Author Index

Beginning January 1987, Cancer Research will be published twice a month. Issues will be numbered from 1 through 24 and dated the 1st and 15th day of each month. All of the subject categories covered by the journal will be represented in every issue.

NOTE: Advance registration form for 78th Annual Meeting of the American Association for Cancer Research available in the back of this issue.