



CONTENTS*

Advances in Brief begin on p. 1988.

PERSPECTIVES IN CANCER RESEARCH

- 1651** Natural History of Intraepithelial Neoplasia in Humans with Implications for Cancer Chemoprevention Strategy. Charles W. Boone, Gary J. Kelloff, and Vernon E. Steele.
- 1660** Brequinar Potentiates 5-Fluorouracil Antitumor Activity in a Murine Model Colon 38 Tumor by Tissue-specific Modulation of Uridine Nucleotide Pools. Giuseppe Pizzorno, Rosemary A. Wiegand, Sarah K. Lentz, and Robert E. Handschumacher.
- 1666** Multidrug Sensitivity Phenotype of Human Lung Cancer Cells Associated with Topoisomerase II Expression. Giuseppe Giaccone, Adi F. Gazdar, Hans Beck, Franco Zunino, and Giovanni Capranico.
- 1675** Carcinogenicity of Uracil, a Nongenotoxic Chemical, in Rats and Mice and Its Rationale. Shoji Fukushima, Hikaru Tanaka, Emiko Asakawa, Masataka Kagawa, Atsushi Yamamoto, and Tomoyuki Shirai.
- 1681** Production and Characterization of a Murine/Human Chimeric Anti-Idiotypic Antibody That Mimics Ganglioside. Alice Hastings, Sherie L. Morrison, Shinji Kanda, Romaine E. Saxton, and Reiko F. Irie.
- 1687** Radiosensitization by Fluorodeoxyuridine: Effects of Thymidylate Synthase Inhibition and Cell Synchronization. Elizabeth M. Miller and T. J. Kinsella.
- 1695** p53 Mutations in Human Lung Tumors. Carl W. Miller, Kenneth Simon, Abdulkarim Aslo, Klaas Kok, Jun Yokota, Charles H. C. M. Buys, Masaaki Terada, and H. Phillip Koeffler.
- 1699** Involvement of Xanthine Oxidase in Oxidative Stress and Iron Release during Hyperthermic Rat Liver Perfusion. Robert H. Powers, Anna Stadnicka, John H. Kalbfleisch, and Joseph L. Skibba.
- 1704** Differential Effects of Estrogen and Antiestrogen on Transforming Growth Factor Gene Expression in Endometrial Adenocarcinoma Cells. Yuewen Gong, Gustavo Ballejo, Leigh C. Murphy, and Liam J. Murphy.
- 1710** Establishment and Characterization of an *in Vitro* Model of Acquired Resistance to Cisplatin in a Human Testicular Nonseminomatous Germ Cell Line. Lloyd R. Kelland, Prakash Mistry, George Abel, Frank Freidlos, Swee Y. Loh, John J. Roberts, and Kenneth R. Harrap.
- 1717** Determination of Plasma Urokinase-type Plasminogen Activator Antigen in Patients with Primary Liver Cancer: Characterization as Tumor-associated Antigen and Comparison with α -Fetoprotein. Kurt Huber, Johannes C. Kirchheimer, Dorothea Ermler, Cameron Bell, and Bernd R. Binder.
- 1721** Benzoquinonoid Ansamycins Possess Selective Tumoricidal Activity Unrelated to *src* Kinase Inhibition. Luke Whitesell, Stuart D. Shifrin, Gisela Schwab, and L. M. Neckers.
- 1729** Enhancement of 5-Fluoro-2'-deoxyuridine Antineoplastic Activity by 5-Benzyloxybenzyloxybenzylacetylouridine in a Human Colon Carcinoma Cell Line. Edward Chu, Ming Y. Chu, James W. Darnowski, Zhi H. Chen, Bai C. Pan, and Shih H. Chu.
- 1737** Fate of Clonal Lineages during Neoplasia and Metastasis Studied with an Incorporated Genetic Marker. Bruce F. Moffett, Dilair Baban, Lere Bao, and David Tarin.
- 1744** Eicosanoid Production by the Human Gastric Cancer Cell Line AGS and Its Relation to Cell Growth. Shuya Shimakura and C. Richard Boland.
- 1750** Tempol, a Stable Free Radical, Is a Novel Murine Radiation Protector. Stephen M. Hahn, Zelig Tochner, C. Murali Krishna, Joseph Glass, Lynn Wilson, Amram Samuni, Merle Sprague, David Venzon, Eli Glatstein, James B. Mitchell, and Angelo Russo.
- 1754** Inhibition of Benzo[a]pyrene-induced Mouse Forestomach Neoplasia by a Principal Flavor Component of Japanese-style Fermented Soy Sauce. Ayumu Nagahara, Hania Benjamin, Jayne Storkson, Jennifer Krewson, Kuan Sheng, Wei Liu, and Michael W. Pariza.
- 1757** Metabolism of 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone in Human Lung and Liver Microsomes and Cytochromes P-450 Expressed in Hepatoma Cells. Theresa J. Smith, Zuyu Guo, Frank J. Gonzalez, F. Peter Guengerich, Gary D. Stoner, and Chung S. Yang.
- 1764** Retention of Cellular Radiation Sensitivity in Cell and Xenograft Lines Established from Human Melanoma Surgical Specimens. Einar K. Rofstad.
- 1770** Role of Aldehyde Dehydrogenase in the Protection of Hematopoietic Progenitor Cells from 4-Hydroperoxycyclophosphamide by Interleukin 1 β and Tumor Necrosis Factor. J. Moreb, J. R. Zucali, Y. Zhang, M. O. Colvin, and M. A. Goss.
- 1775** Sialyltransferase Activity and Hepatic Tumor Growth in a Nude Mouse Model of Colorectal Cancer Metastases. Brian E. Harvey, Carol Ann Toth, Hans E. Wagner, Glenn D. Steele, Jr., and Peter Thomas.
- 1780** Loss of Heterozygosity for Chromosomes 1 or 14 Defines Subsets of Advanced Neuroblastomas. Chin-to Fong, Peter S. White, Karen Peterson, Carmen Sapienza, Webster K. Cavenee, Scott E. Kern, Bert Vogelstein, Alan B. Cantor, A. Thomas Look, and Garrett M. Brodeur.
- 1786** Bombesin and Glucocorticoids Stimulate Human Breast Cancer Cells to Produce Endothelin, a Paracrine Mitogen for Breast Stromal Cells. Michael P. Schrey, Kirti V. Patel, and Nikolaos Tezapsidis.
- 1791** Association of Cyst Type with Risk Factors for Breast Cancer and Relapse Rate in Women with Gross Cystic Disease of the Breast. Carlo Naldoni, Massimo Costantini, Luigi Dogliotti, Paolo Bruzzi, Lauro Bucchi, Gianfranco Buzzi, Mirella Torta, and Alberto Angeli.
- 1796** Stable Expression of Human Cytochrome P450IIE1 in Mammalian Cells: Metabolic Activation of Nitrosodimethylamine and Formation of Adducts with Cellular DNA. Kazuhiro Nouse, Snorri S. Thorgeirsson, and Narayana Battula.

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

- 1801 **Relevance of Environmental Alkylating Agents to Repair Protein O⁶-Alkylguanine-DNA Alkyltransferase: Determination of Individual and Collective Repair Capacities of O⁶-Methylguanine.** F. Oesch and S. Klein.
- 1804 **Irradiation-induced Expression of O⁶-Methylguanine-DNA Methyltransferase in Mammalian Cells.** C-L. Chan, Zining Wu, Alan Eastman, and Edward Bresnick.
- 1810 **Reversal of Vinca Alkaloid Resistance by Anti-P-Glycoprotein Monoclonal Antibody HYB-241 in a Human Tumor Xenograft.** Lana S. Rittmann-Grauer, Milicent A. Yong, Vikki Sanders, and Daniel G. Mackensen.
- 1817 **Inhibition of p34^{cdc2} Kinase Activation, p34^{cdc2} Tyrosine Dephosphorylation, and Mitotic Progression in Chinese Hamster Ovary Cells Exposed to Etoposide.** Richard B. Lock.
- 1823 **The Involvement of Active DNA Synthesis in Camptothecin-induced G₂ Arrest: Altered Regulation of p34^{cdc2}/Cyclin B.** Yeou-Ping Tsao, Peter D'Arpa, and Leroy F. Liu.
- 1830 **Suramin Inhibits the Growth of Human Rhabdomyosarcoma by Interrupting the Insulin-like Growth Factor II Autocrine Growth Loop.** Caterina P. Minniti, Mario Maggi, and Lee J. Helman.
- 1836 **Induction of Mutation of a Synthetic c-Ha-ras Gene Containing Hypoxanthine.** Hiroyuki Kamiya, Hiroyuki Miura, Hisayo Kato, Susumu Nishimura, and Eiko Ohtsuka.
- 1840 **Differential Effects of Polyamine Homologues on the Prevention of DL- α -Difluoromethylornithine-mediated Inhibition of Malignant Cell Growth and Normal Immune Response.** Ajay B. Singh, T. J. Thomas, Thresia Thomas, Manjeet Singh, and Richard A. Mann.
- 1848 **Topoisomerase I Alteration in a Camptothecin-resistant Cell Line Derived from Chinese Hamster DC3F Cells in Culture.** Akihiko Tanizawa and Yves Pommier.
- 1855 **Novel Mechanism(s) of Resistance to 5-Fluorouracil in Human Colon Cancer (HCT-8) Sublines following Exposure to Two Different Clinically Relevant Dose Schedules.** Carlo Aschele, Alberto Sobrero, Mary A. Faderan, and Joseph R. Bertino.
- 1865 **Therapeutic Activity of a Thioether-Lipid Conjugate of 1- β -D-Arabinofuranosylcytosine in Human Colorectal Cancer Xenografts.** Richard Herrmann and Wolfgang E. Berdel.
- 1868 **Roles of Human Liver Cytochrome P450C and 3A Enzymes in the 3-Hydroxylation of Benzo(a)pyrene.** Chul-Ho Yun, Tsutomu Shimada, and F. Peter Guengerich.
- 1875 **Elevation of 4 β -Galactosyltransferase Activity for Paragloboside Synthesis in Sera of Patients with Cancer.** Shigeru Nishiwaki, Takao Taki, Nobuko Handa, Nobu Hattori, Kimiya Takeshita, Mitsuo Endo, and Shizuo Handa.
- 1881 **Allelic Losses at Chromosome 17p in Human Renal Cell Carcinoma Are Inversely Related to Allelic Losses at Chromosome 3p.** Osamu Ogawa, Tomonori Habuchi, Yoshiyuki Kakehi, Masahiro Koshiba, Taketoshi Sugiyama, and Osamu Yoshida.
- 1886 **Biochemical Characterization of Resistance to Mitoxantrone and Adriamycin in Caco-2 Human Colon Adenocarcinoma Cells: A Possible Role for Glutathione S-Transferases.** Wilbert H. M. Peters and Hennie M. J. Roelofs.
- 1891 **Inhibitors of Polyamine Biosynthesis Block Tumor Necrosis Factor-induced Activation of Macrophages.** Leszek Kaczmarek, Bozena Kaminska, Luigi Messina, Giuseppina Spampinato, Antonio Arcidiacono, Lucia Malaguarnera, and Angelo Messina.
- 1895 **Mitochondrial Defects in cis-Diamminedichloroplatinum(II)-resistant Human Ovarian Carcinoma Cells.** Paul A. Andrews and Kathleen D. Albright.
- 1902 **Loss of cis-Diamminedichloroplatinum(II) Resistance in Human Ovarian Carcinoma Cells Selected for Rhodamine 123 Resistance.** Karen Zinkewich-Péotti and Paul A. Andrews.
- 1907 **Acquisition of a Growth-inhibitory Response to Phorbol Ester Involves DNA Damage.** Yi Sun, Yves Pommier, and Nancy H. Colburn.
- 1916 **Radiolabeled Antibody Targeting of the HER-2/neu Oncoprotein.** Kenneth De Santes, Dennis Slamon, Susan K. Anderson, Michael Shepard, Brian Fendly, Daniel Maneval, and Oliver Press.
- 1924 **Development of Mammary Preneoplasias *in Vivo* from Mouse Mammary Epithelial Cell Lines *in Vitro*.** Frances S. Kittrell, Carol J. Oborn, and Daniel Medina.
- 1933 **Formation of PC12 Tumors after Transplantation into Rat Brains: Dependence of Time Course on Host Age.** James D. Hatton, Alex N. Lechtman, and Hoi Sang U.
- 1938 **Migratory Behavior of PC12 Cells Transplanted into Neonatal Rat Brain.** James D. Hatton, Brent C. Jackson, Patricia Y. Kelley, and Hoi Sang U.
- 1943 **Inhibition of N-Nitrosodiethylamine- and 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced Tumorigenesis in A/J Mice by Green Tea and Black Tea.** Zhi Yuan Wang, Jun-Yan Hong, Mou-Tuan Huang, Kenneth R. Reuhl, Allan H. Conney, and Chung S. Yang.
- 1948 **²⁵²Cf Relative Biological Effectiveness and Inheritable Effect of Fission Neutrons in Mouse Liver Tumorigenesis.** Tadateru Takahashi, Hiromitsu Watanabe, Kiyohiko Dohi, and Akihiro Ito.
- 1954 **Tissue-specific Expression of a Human Polymorphic Epithelial Mucin (MUC1) in Transgenic Mice.** Nigel Peat, Sandra J. Gendler, El-Nasir Lalani, Trevor Duhig, and Joyce Taylor-Papadimitriou.
- 1961 **Intratumoral and Whole-Body Distributions of C110 Anti-Carcinoembryonic Antigen Radioimmunotoxin after Intraperitoneal and Intravenous Injection: A Quantitative Autoradiographic Study.** Tsunao Ito, Thomas W. Griffin, Jeffrey A. Collins, and A. Bertrand Brill.
- 1968 **Expression of the Retinoblastoma Gene Product in Bladder Carcinoma Cells Associates with a Low Frequency of Tumor Formation.** David W. Goodrich, Yumay Chen, Peter Scully, and Wen-Hwa Lee.
- 1974 **Expression of p53 and 17p Allelic Loss in Colorectal Carcinoma.** Julie Cunningham, John A. Lust, Daniel J. Schaid, Gary D. Bren, Herschel A. Carpenter, Elizabeth Rizza, John S. Kovach, and Stephen N. Thibodeau.
- 1981 **Immunohistochemical Localization of Cell Adhesion Molecule Epithelial Cadherin in Human Arachnoid Villi and Meningiomas.** Yasuo Tohma, Tetsumori Yamashima, and Junkoh Yamashita.

ADVANCES IN BRIEF

- 1988 **Phenylacetate: A Novel Nontoxic Inducer of Tumor Cell Differentiation.** Dvorit Samid, Sonsoles Shack, and Lin Ti Sherman.
- 1993 **Interstitial Hypertension in Head and Neck Tumors in Patients: Correlation with Tumor Size.** Ralph Gutmann, Michael Leunig, Jens Feyh, Alwin E. Goetz, Konrad Messmer, Ernst Kastenbauer, and Rakesh K. Jain.
- 1996 **Polymorphic Sites within the MCC and APC Loci Reveal Very Frequent Loss of Heterozygosity in Human Small Cell Lung Cancer.** Domenico D'Amico, David P. Carbone, Bruce E. Johnson, Stephen J. Meltzer, and John D. Minna.
- 2000 **Altered Steady-State Levels of the Messenger RNAs for c-myc and p53 in L1210 Cell Lines Resistant to Deoxyadenosine.** Joseph G. Cory, Ann H. Cory, Sheree D. Long, Gay L. Carter, and Cheryl E. Johnson.
- 2004 **Expression of Fibroblast Growth Factor Receptors in Human Leukemia Cells.** Elina Armstrong, Satu Vainikka, Juha Partanen, Jaana Korhonen, and Riitta Alitalo.

2008 Efficient Repair of *O*⁶-Ethylguanine, but not *O*⁴-Ethylthymine or *O*²-Ethylthymine, Is Dependent upon *O*⁶-Alkylguanine-DNA Alkyltransferase and Nucleotide Excision Repair Activities in Human Cells. S. Maynard Bronstein, Thomas R. Skopek, and James A. Swenberg.

MEETING REPORT

2012 The Beijing Blood Cell Growth Factors Symposium—Blood Cell Growth Factors: Their Present and Future Use in Hematology and Oncology. Nicos A. Nicola and Martin J. Murphy, Jr.

2014 Announcements
Eighty-Third Annual Meeting of the AACR
AACR Special Conferences in Cancer Research
Future Annual Meetings of the AACR
Recent Deaths
Calendar of Events

2017 Author Index

NOTE: AACR forms available in the back of this issue—

- Application for Active and Corresponding Membership
- Application for Associate Membership
- Advance Registration Form for the 83rd Annual Meeting

Also available in the back of this issue—
**GUIDELINES FOR SUBMITTING DISKS TO
AACR PUBLICATIONS**

Cancer Research

VOLUME 52 • NUMBER 7

CONTENTS Arranged by Subject Category

ADVANCES IN BRIEF

- 1988 Phenylacetate: A Novel Nontoxic Inducer of Tumor Cell Differentiation. Dvorit Samid, Sonsoles Shack, and Lin Ti Sherman.
- 1993 Interstitial Hypertension in Head and Neck Tumors in Patients: Correlation with Tumor Size. Ralph Gutmann, Michael Leunig, Jens Feyh, Alwin E. Goetz, Konrad Messmér, Ernst Kastenbauer, and Rakesh K. Jain.
- 1996 Polymorphic Sites within the *MCC* and *APC* Loci Reveal Very Frequent Loss of Heterozygosity in Human Small Cell Lung Cancer. Domeníco D'Amico, David P. Carbone, Bruce E. Johnson, Stephen J. Meltzer, and John D. Minna.
- 2000 Altered Steady-State Levels of the Messenger RNAs for *c-myc* and *p53* in L1210 Cell Lines Resistant to Deoxyadenosine. Joseph G. Cory, Ann H. Cory, Sheree D. Long, Gay L. Carter, and Cheryl E. Johnson.
- 2004 Expression of Fibroblast Growth Factor Receptors in Human Leukemia Cells. Elina Armstrong, Satu Vainikka, Juha Partanen, Jaana Korhonen, and Riitta Alitalo.
- 2008 Efficient Repair of *O*⁶-Ethylguanine, but not *O*⁶-Ethylthymine or *O*²-Ethylthymine, Is Dependent upon *O*⁶-Alkylguanine-DNA Alkyltransferase and Nucleotide Excision Repair Activities in Human Cells. S. Maynard Bronstein, Thomas R. Skopek, and James A. Swenberg.
- 1754 Inhibition of Benzo[*a*]pyrene-induced Mouse Forestomach Neoplasia by a Principal Flavor Component of Japanese-style Fermented Soy Sauce. Ayumu Nagahara, Hania Benjamin, Jayne Storkson, Jennifer Krewson, Kuan Sheng, Wei Liu, and Michael W. Pariza.
- 1757 Metabolism of 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone in Human Lung and Liver Microsomes and Cytochromes P-450 Expressed in Hepatoma Cells. Theresa J. Smith, Zuyu Guo, Frank J. Gonzalez, F. Peter Guengerich, Gary D. Stoner, and Chung S. Yang.
- 1796 Stable Expression of Human Cytochrome P450IIE1 in Mammalian Cells: Metabolic Activation of Nitrosodimethylamine and Formation of Adducts with Cellular DNA. Kazuhiro Nouse, Snorri S. Thorgeirsson, and Narayana Battula.
- 1801 Relevance of Environmental Alkylating Agents to Repair Protein *O*⁶-Alkylguanine-DNA Alkyltransferase: Determination of Individual and Collective Repair Capacities of *O*⁶-Methylguanine. F. Oesch and S. Klein.
- 1836 Induction of Mutation of a Synthetic *c-Ha-ras* Gene Containing Hypoxanthine. Hiroyuki Kamiya, Hiroyuki Miura, Hisayo Kato, Susumu Nishimura, and Eiko Ohtsuka.
- 1868 Roles of Human Liver Cytochrome P4502C and 3A Enzymes in the 3-Hydroxylation of Benzo(*a*)pyrene. Chul-Ho Yun, Tsutomu Shimada, and F. Peter Guengerich.
- 1907 Acquisition of a Growth-inhibitory Response to Phorbol Ester Involves DNA Damage. Yi Sun, Yves Pommier, and Nancy H. Colburn.

PERSPECTIVES IN CANCER RESEARCH

- 1651 Natural History of Intraepithelial Neoplasia in Humans with Implications for Cancer Chemoprevention Strategy. Charles W. Boone, Gary J. Kelloff, and Vernon E. Steele.
- 1943 Inhibition of *N*-Nitrosodiethylamine- and 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced Tumorigenesis in A/J Mice by Green Tea and Black Tea. Zhi Yuan Wang, Jun-Yan Hong, Mou-Tuan Huang, Kenneth R. Reuhl, Allan H. Conney, and Chung S. Yang.
- 1948 ²⁵²Cf Relative Biological Effectiveness and Inheritable Effect of Fission Neutrons in Mouse Liver Tumorigenesis. Tadateru Takahashi, Hiromitsu Watanabe, Kiyohiko Dohi, and Akihiro Ito.

BASIC SCIENCES

Biochemistry and Biophysics

- 1744 Eicosanoid Production by the Human Gastric Cancer Cell Line AGS and Its Relation to Cell Growth. Shuya Shimakura and C. Richard Boland.
- 1804 Irradiation-induced Expression of *O*⁶-Methylguanine-DNA Methyltransferase in Mammalian Cells. C-L. Chan, Zining Wu, Alan Eastman, and Edward Bresnick.
- 1875 Elevation of 4 β -Galactosyltransferase Activity for Paragloboside Synthesis in Sera of Patients with Cancer. Shigeru Nishiwaki, Takao Taki, Nobuko Handa, Nobu Hattori, Kimiya Takeshita, Mitsuo Endo, and Shizuo Handa.
- 1886 Biochemical Characterization of Resistance to Mitoxantrone and Adriamycin in Caco-2 Human Colon Adenocarcinoma Cells: A Possible Role for Glutathione *S*-Transferases. Wilbert H. M. Peters and Hennie M. J. Roelofs.

Carcinogenesis

- 1675 Carcinogenicity of Uracil, a Nongenotoxic Chemical, in Rats and Mice and Its Rationale. Shoji Fukushima, Hikaru Tanaka, Emiko Asakawa, Masataka Kagawa, Atsushi Yamamoto, and Tomoyuki Shirai.

Endocrinology

- 1704 Differential Effects of Estrogen and Antiestrogen on Transforming Growth Factor Gene Expression in Endometrial Adenocarcinoma Cells. Yuewen Gong, Gustavo Ballejo, Leigh C. Murphy, and Liam J. Murphy.
- 1786 Bombesin and Glucocorticoids Stimulate Human Breast Cancer Cells to Produce Endothelin, a Paracrine Mitogen for Breast Stromal Cells. Michael P. Schrey, Kirti V. Patel, and Nikolaos Tezapsidis.

Immunology

- 1681 Production and Characterization of a Murine/Human Chimeric Anti-Idiotypic Antibody That Mimics Ganglioside. Alice Hastings, Sherie L. Morrison, Shinji Kanda, Romaine E. Saxton, and Reiko F. Irie.
- 1891 Inhibitors of Polyamine Biosynthesis Block Tumor Necrosis Factor-induced Activation of Macrophages. Leszek Kaczmarek, Bozena Kaminska, Luigi Messina, Giuseppina Spampinato, Antonio Arcidiacono, Lucia Malaguarnera, and Angelo Messina.
- 1916 Radiolabeled Antibody Targeting of the HER-2/*neu* Oncoprotein. Kenneth De Santes, Dennis Slamon, Susan K. Anderson, Michael Shepard, Brian Fendly, Daniel Maneval, and Oliver Press.

1961 **Intratumoral and Whole-Body Distributions of C110 Anti-Carcinoembryonic Antigen Radioimmunotoxin after Intraperitoneal and Intravenous Injection: A Quantitative Autoradiographic Study.** Tsunao Ito, Thomas W. Griffin, Jeffrey A. Collins, and A. Bertrand Brill.

Molecular Biology and Genetics

- 1695 **p53 Mutations in Human Lung Tumors.** Carl W. Miller, Kenneth Simon, Abdulkarim Aslo, Klaas Kok, Jun Yokota, Charles H. C. M. Buys, Masaaki Terada, and H. Phillip Koeffler.
- 1780 **Loss of Heterozygosity for Chromosomes 1 or 14 Defines Subsets of Advanced Neuroblastomas.** Chin-to Fong, Peter S. White, Karen Peterson, Carmen Sapienza, Webster K. Cavenee, Scott E. Kern, Bert Vogelstein, Alan B. Cantor, A. Thomas Look, and Garrett M. Brodeur.
- 1823 **The Involvement of Active DNA Synthesis in Camptothecin-induced G₂ Arrest: Altered Regulation of p34^{cdc2}/Cyclin B.** Yeou-Ping Tsao, Peter D'Arpa, and Leroy F. Liu.
- 1881 **Allelic Losses at Chromosome 17p in Human Renal Cell Carcinoma Are Inversely Related to Allelic Losses at Chromosome 3p.** Osamu Ogawa, Tomonori Habuchi, Yoshiyuki Kakehi, Masahiro Koshiba, Taketoshi Sugiyama, and Osamu Yoshida.
- 1968 **Expression of the Retinoblastoma Gene Product in Bladder Carcinoma Cells Associates with a Low Frequency of Tumor Formation.** David W. Goodrich, Yumay Chen, Peter Scully, and Wen-Hwa Lee.

Preclinical Pharmacology and Experimental Therapeutics

- 1660 **Brequinar Potentiates 5-Fluorouracil Antitumor Activity in a Murine Model Colon 38 Tumor by Tissue-specific Modulation of Uridine Nucleotide Pools.** Giuseppe Pizzorno, Rosemary A. Wiegand, Sarah K. Lentz, and Robert E. Handschumacher.
- 1666 **Multidrug Sensitivity Phenotype of Human Lung Cancer Cells Associated with Topoisomerase II Expression.** Giuseppe Giaccone, Adi F. Gazdar, Hans Beck, Franco Zunino, and Giovanni Capranico.
- 1687 **Radiosensitization by Fluorodeoxyuridine: Effects of Thymidylate Synthase Inhibition and Cell Synchronization.** Elizabeth M. Miller and T. J. Kinsella.
- 1699 **Involvement of Xanthine Oxidase in Oxidative Stress and Iron Release during Hyperthermic Rat Liver Perfusion.** Robert H. Powers, Anna Stadnicka, John H. Kalbfleish, and Joseph L. Skibba.
- 1710 **Establishment and Characterization of an *in Vitro* Model of Acquired Resistance to Cisplatin in a Human Testicular Nonseminomatous Germ Cell Line.** Lloyd R. Kelland, Prakash Mistry, George Abel, Frank Freidlos, Swee Y. Loh, John J. Roberts, and Kenneth R. Harrap.
- 1729 **Enhancement of 5-Fluoro-2'-deoxyuridine Antineoplastic Activity by 5-Benzyloxybenzyloxybenzylacetyluridine in a Human Colon Carcinoma Cell Line.** Edward Chu, Ming Y. Chu, James W. Darnowski, Zhi H. Chen, Bai C. Pan, and Shih H. Chu.
- 1750 **Tempol, a Stable Free Radical, Is a Novel Murine Radiation Protector.** Stephen M. Hahn, Zelig Tochner, C. Murali Krishna, Joseph Glass, Lynn Wilson, Amram Samuni, Merle Sprague, David Venzon, Eli Glatstein, James B. Mitchell, and Angelo Russo.
- 1764 **Retention of Cellular Radiation Sensitivity in Cell and Xenograft Lines Established from Human Melanoma Surgical Specimens.** Einar K. Rofstad.
- 1770 **Role of Aldehyde Dehydrogenase in the Protection of Hematopoietic Progenitor Cells from 4-Hydroperoxycyclophosphamide by Interleukin 1 β and Tumor Necrosis Factor.** J. Moreb, J. R. Zucali, Y. Zhang, M. O. Colvin, and M. A. Gross.

1810 **Reversal of *Vinca* Alkaloid Resistance by Anti-P-Glycoprotein Monoclonal Antibody HYB-241 in a Human Tumor Xenograft.** Lana S. Rittmann-Grauer, Milicent A. Yong, Vikki Sanders, and Daniel G. Mackensen.

1817 **Inhibition of p34^{cdc2} Kinase Activation, p34^{cdc2} Tyrosine Dephosphorylation, and Mitotic Progression in Chinese Hamster Ovary Cells Exposed to Etoposide.** Richard B. Lock.

1840 **Differential Effects of Polyamine Homologues on the Prevention of D₁- α -Difluoromethylornithine-mediated Inhibition of Malignant Cell Growth and Normal Immune Response.** Ajay B. Singh, T. J. Thomas, Thresia Thomas, Manjeet Singh, and Richard A. Mann.

1848 **Topoisomerase I Alteration in a Camptothecin-resistant Cell Line Derived from Chinese Hamster DC3F Cells in Culture.** Akihiko Tanizawa and Yves Pommier.

1865 **Therapeutic Activity of a Thioether-Lipid Conjugate of 1- β -D-Arabinofuranosylcytosine in Human Colorectal Cancer Xenografts.** Richard Herrmann and Wolfgang E. Berdel.

1895 **Mitochondrial Defects in *cis*-Diamminedichloroplatinum(II)-resistant Human Ovarian Carcinoma Cells.** Paul A. Andrews and Kathleen D. Albright.

1902 **Loss of *cis*-Diamminedichloroplatinum(II) Resistance in Human Ovarian Carcinoma Cells Selected for Rhodamine 123 Resistance.** Karen Zinkewich-Péotti and Paul A. Andrews.

Tumor Biology

1721 **Benzoquinonoid Ansamycins Possess Selective Tumoricidal Activity Unrelated to *src* Kinase Inhibition.** Luke Whitesell, Stuart D. Shifrin, Gisela Schwab, and L. M. Neckers.

1737 **Fate of Clonal Lineages during Neoplasia and Metastasis Studied with an Incorporated Genetic Marker.** Bruce F. Moffett, Dilair Baban, Lere Bao, and David Tarin.

1775 **Sialyltransferase Activity and Hepatic Tumor Growth in a Nude Mouse Model of Colorectal Cancer Metastases.** Brian E. Harvey, Carol Ann Toth, Hans E. Wagner, Glenn D. Steele, Jr., and Peter Thomas.

1830 **Suramin Inhibits the Growth of Human Rhabdomyosarcoma by Interrupting the Insulin-like Growth Factor II Autocrine Growth Loop.** Caterina P. Minniti, Mario Maggi, and Lee J. Helman.

1855 **Novel Mechanism(s) of Resistance to 5-Fluorouracil in Human Colon Cancer (HCT-8) Sublines following Exposure to Two Different Clinically Relevant Dose Schedules.** Carlo Aschele, Alberto Sobrero, Mary A. Faderan, and Joseph R. Bertino.

1924 **Development of Mammary Preneoplasias *in Vivo* from Mouse Mammary Epithelial Cell Lines *in Vitro*.** Frances S. Kittrell, Carol J. Oborn, and Daniel Medina.

1933 **Formation of PC12 Tumors after Transplantation into Rat Brains: Dependence of Time Course on Host Age.** James D. Hatton, Alex N. Lechtman, and Hoi Sang U.

1938 **Migratory Behavior of PC12 Cells Transplanted into Neonatal Rat Brain.** James D. Hatton, Brent C. Jackson, Patricia Y. Kelley, and Hoi Sang U.

1954 **Tissue-specific Expression of a Human Polymorphic Epithelial Mucin (MUC1) in Transgenic Mice.** Nigel Peat, Sandra J. Gendler, El-Nasir Lalani, Trevor Duhig, and Joyce Taylor-Papadimitriou.

1974 **Expression of p53 and 17p Allelic Loss in Colorectal Carcinoma.** Julie Cunningham, John A. Lust, Daniel J. Schaid, Gary D. Bren, Herschel A. Carpenter, Elizabeth Rizza, John S. Kovach, and Stephen N. Thibodeau.

1981 **Immunohistochemical Localization of Cell Adhesion Molecule Epithelial Cadherin in Human Arachnoid Villi and Meningiomas.** Yasuo Tohma, Tetsumori Yamashima, and Junkoh Yamashita.

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

Clinical

- 1717** Determination of Plasma Urokinase-type Plasminogen Activator Antigen in Patients with Primary Liver Cancer: Characterization as Tumor-associated Antigen and Comparison with α -Fetoprotein. Kurt Huber, Johannes C. Kirchheimer, Dorothea Ermler, Cameron Bell, and Bernd R. Binder.

Epidemiological

- 1791** Association of Cyst Type with Risk Factors for Breast Cancer and Relapse Rate in Women with Gross Cystic Disease of the Breast. Carlo Naldoni, Massimo Costantini, Luigi Dogliotti, Paolo Bruzzi, Lauro Bucchi, Gianfranco Buzzi, Mirella Torta, and Alberto Angeli.

MEETING REPORT

- 2012** The Beijing Blood Cell Growth Factors Symposium—Blood Cell Growth Factors: Their Present and Future Use in Hematology and Oncology. Nicos A. Nicola and Martin J. Murphy, Jr.
-

2014 Announcements

Eighty-Third Annual Meeting of the AACR
AACR Special Conferences in Cancer Research
Future Annual Meetings of the AACR
Recent Deaths
Calendar of Events

2017 Author Index

NOTE: AACR forms available in the back of this issue—

- Application for Active and Corresponding Membership
- Application for Associate Membership
- Advance Registration Form for the 83rd Annual Meeting

Also available in the back of this issue—
GUIDELINES FOR SUBMITTING DISKS TO
AACR PUBLICATIONS

Cancer Research

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

52 (7)

Cancer Res 1992;52:1651-2016.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/52/7.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, use this link <http://cancerres.aacrjournals.org/content/52/7.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.