



CONTENTS†

Asterisks * preceding page numbers refer to studies using human-derived material.

BASIC SCIENCES

- 6169 Ability of the α and β Anomers of Chlorozotocin to Kill Rat 9L Tumor Cells *in Vitro*. Ka-Ho Wong and Kenneth T. Wheeler.
- 6174 Formation of Cyclic 1,*N*²-Propanodeoxyguanosine and Thymidine Adducts in the Reaction of the Mutagen 2-Bromoacrolein with Calf Thymus DNA. John H. N. Meerman, Timothy R. Smith, Paul G. Pearson, G. Patrick Meier, and Sidney D. Nelson.
- 6180 Influence of Vitamin B₂ on Formation of Chromium(V), Alkali-labile Sites, and Lethality of Sodium Chromate(VI) in Chinese Hamster V-79 Cells. Masayasu Sugiyama, Akikazu Ando, Kumi Nakao, Hiroshi Ueta, Toshihiro Hidaka, and Ryohei Ogura.
- *6185 Cross-Resistance and Glutathione-S-transferase- π Levels among Four Human Melanoma Cell Lines Selected for Alkylating Agent Resistance. Yenyun Wang, Beverly A. Teicher, Thomas C. Shea, Sylvia A. Holden, Kristina W. Rosbe, Antoine Al-Achi, and W. David Henner.
- 6193 Characterization of the Hydroperoxide Response Observed in Mouse Skin Treated with Tumor Promoters *in Vivo*. Elisabeth M. Perchellet and Jean-Pierre Perchellet.
- *6202 Altered Formation of DNA in Human Cells Treated with Inhibitors of DNA Topoisomerase II (Etoposide and Teniposide). Ulf Lönn, Sigrid Lönn, Urban Nylen, and Gerard Winblad.
- 6208 Interaction of PtCl₂(Fast Black)₂ with Hyperthermia. Beverly A. Teicher, Terence S. Herman, M. Raphael Pfeffer, Enrique Alvarez Sotomayor, and Vrinda S. Khandekar.
- 6214 Monoclonal Antibody Targeting of Liposomes to Mouse Lung *in Vivo*. Brenda J. Hughes, Stephen Kennel, Ray Lee, and Leaf Huang.
- *6221 Aberrant Expression of Epidermal Growth Factor Receptor and HER-2 (*erbB*-2) Messenger RNAs in Human Renal Cancers. Michael R. Freeman, Robert Washecka, and Leland W. K. Chung.
- *6226 Major Increases in Spermidine/Spermine-*N*¹-Acetyltransferase Activity by Spermine Analogues and Their Relationship to Polyamine Depletion and Growth Inhibition in L1210 Cells. Paul R. Libby, Mark Henderson, Raymond J. Bergeron, and Carl W. Porter.
- *6232 Potentiation of Interferon Induction of Class I Major Histocompatibility Complex Antigen Expression by Human Tumor Necrosis Factor in Small Cell Lung Cancer Cell Lines. Garry M. Marley, L. Austin Doyle, José V. Ordóñez, Allison Sisk, Arif Hussain, and Ray-Whay Chiu Yen.
- *6237 Growth Inhibition of Human Breast Cancer Cells *in Vitro* with an Antibody against the Type I Somatomedin Receptor. Carlos L. Arteaga and C. Kent Osborne.
- 6242 Altered Adrenergic Response and Specificity of the Receptors in Rat Ascites Hepatoma AH130. Fujiko Sanae, Ken-ichi Miyamoto, and Ryozo Koshiura.
- *6247 Assignment of Common Allele Loss in Osteosarcoma to the Subregion 17p13. Junya Toguchida, Kanji Ishizaki, Yusuke Nakamura, Masao S. Sasaki, Mituo Ikenaga, Mitsuo Kato, Masayuki Sugimoto, Yoshihiko Kotoura, and Takao Yamamuro.
- 6252 Hyperthermic Modulation of Respiratory Inhibition Factor- and Iron Releasing Factor-dependent Macrophage Murine Tumor Cytotoxicity. Jim Klostergaard, Marketa Barta, and Stephen P. Tomasovic.
- *6258 Sialyltransferase Levels and Ganglioside Expression in Melanoma and Other Cultured Human Cancer Cells. Immac J. Thampoe, Koichi Furukawa, Eugenia Vellvé, and Kenneth O. Lloyd.
- 6265 Possible Role of Inhibition of Glutathione S-Transferase in the Partial Reversal of Chlorambucil Resistance by Indomethacin in a Chinese Hamster Ovary Cell Line. Andrew Hall, Craig N. Robson, Ian D. Hickson, Adrian L. Harris, Stephen J. Proctor, and Alex R. Cattan.
- *6269 Production of and Responsiveness to Transforming Growth Factor- β in Normal and Oncogene-transformed Human Mammary Epithelial Cells. Eva M. Valverius, Dorothy Walker-Jones, Susan E. Bates, Martha R. Stampfer, Robin Clark, Frank McCormick, Robert B. Dickson, and Marc E. Lippman.
- 6275 Enhancement of Anthracycline Growth Inhibition in Parent and Multidrug-resistant Chinese Hamster Ovary Cells by Cyclosporin A and Its Analogues. Setsuko K. Chambers, William N. Hait, Barry M. Kacinski, Susan R. Keyes, and Robert E. Handschumacher.
- *6280 Mediation of Anorexia by Human Recombinant Tumor Necrosis Factor through a Peripheral Action in the Rat. Richard J. Bodnar, Gavril W. Pasternak, Phyllis E. Mann, Dennis Paul, Robert Warren, and David B. Donner.
- *6285 Cytotoxic Interactions of Heat and an Ether Lipid Analogue in Human Ovarian Carcinoma Cells. Keiichi Fujiwara, Edward J. Modest, Charles E. Welander, and C. Anne Wallen.
- 6290 Relationship between Tumor Size and Curability of Prostatic Cancer by Combined Chemo-Hormonal Therapy in Rats. John T. Isaacs.
- 6295 Antiestrogen Inhibition of Prolactin-induced Growth of the Nb2 Rat Lymphoma Cell Line. Ratna Biswas and Barbara K. Vonderhaar.
- 6300 Effects of Dietary Fat, Calcium, and Vitamin D on Growth and Mammary Tumorigenesis Induced by 7,12-Dimethylbenzo(*a*)anthracene in Female Sprague-Dawley Rats. E. Ann Jacobson, Kathi A. James, Harold L. Newmark, and Kenneth K. Carroll.
- *6304 Roles of Individual Human Cytochrome P-450 Enzymes in the Bioactivation of Benzo(*a*)pyrene, 7,8-Dihydroxy-7,8-dihydrobenzo(*a*)pyrene, and Other Dihydrodiol Derivatives of Polycyclic Aromatic Hydrocarbons. Tsutomu Shimada, Martha V. Martin, Donna Pruess-Schwartz, Lawrence J. Marnett, and F. Peter Guengerich.

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

- 6313 Effect of Intraperitoneal *versus* Intravenous Glucose Administration on Laser Doppler Flow in Murine FSaII Tumors and Normal Skin. J. Kalmus, P. Okunieff, and P. Vaupel.
- *6318 Expression of Human DNA Topoisomerase I in Yeast Cells Lacking Yeast DNA Topoisomerase I: Restoration of Sensitivity of the Cells to the Antitumor Drug Camptothecin. Mary-Ann Bjornsti, Piero Benedetti, Gregory A. Viglianti, and James C. Wang.
- *6324 Detection of Point Mutations in N-ras and K-ras Genes of Human Embryonal Rhabdomyosarcomas Using Oligonucleotide Probes and the Polymerase Chain Reaction. M. R. Stratton, C. Fisher, B. A. Gusterson, and C. S. Cooper.
- 6328 Pharmacokinetics and Systemic Bioavailability of Menogaril, an Anthracycline Antitumor Agent, in the Mouse, Dog, and Monkey. Wade J. Adams, J. Patrick McGovren, Evelyn A. Dalm, Jack E. Brewer, and John D. Hosley.
- 6337 Toxicity of Methotrexate in Rats Preexposed to Nitrous Oxide. Anton A. M. Ermens, Martijn Schoester, Lidwien J. M. Spijkers, Jan Lindemans, and Johan Abels.
- 6342 Apoptosis (Cell Death) Induced in Mouse Bowel by 1,2-Dimethylhydrazine, Methylazoxymethanol Acetate, and γ -Rays. Kenichi Ijiri.
- *6347 DNA *in Situ* Sensitivity to Denaturation as a Marker of Human Breast Tumors. J. E. Kunicka, W. Olszewski, P. P. Rosen, M. Kimmel, M. R. Melamed, and Z. Darzynkiewicz.
- *6352 Characterization of Receptors for α -Melanocyte-stimulating Hormone on Human Melanoma Cells. Walter Siegrist, Flavio Solca, Sibylla Stutz, Laura Giuffrè, Stefan Carrel, Jürg Girard, and Alex N. Eberle.
- 6359 Dose-dependent Pharmacokinetics of Methotrexate and 7-Hydroxymethotrexate in the Rat *in Vivo*. Roy M. Bremnes, Lars Slørdal, Erik Wist, and Jarle Aarbakke.
- 6365 Differential Requirement of DNA Replication for the Cytotoxicity of DNA Topoisomerase I and II Inhibitors in Chinese Hamster DC3F Cells. Christine Holm, Joseph M. Covey, Donna Kerrigan, and Yves Pommier.
- 6369 Promoting Effects of Unleaded Gasoline and 2,2,4-Trimethylpentane on the Development of Atypical Cell Foci and Renal Tubular Cell Tumors in Rats Exposed to *N*-Ethyl-*N*-hydroxyethyl-nitrosamine. Brian G. Short, William H. Steinhagen, and James A. Swenberg.
- *6379 ³¹P-Nuclear Magnetic Resonance Studies of the Effect of Recombinant Human Interleukin 1 α on the Bioenergetics of RIF-1 Tumors. Ioannis Constantinidis, Paul G. Braunschweiger, Janna P. Wehrle, Nirmal Kumar, Candace S. Johnson, Philip Furmanski, and Jerry D. Glickson.
- *6383 Yttrium-90 and Iodine-131 Radioimmunoglobulin Therapy of an Experimental Human Hepatoma. Jerry L. Klein, Thi Hien Nguyen, Philippe Laroque, Kenneth A. Kopher, Jerry R. Williams, Barry W. Wessels, Larry E. Dillehay, James Frincke, Stanley E. Order, and Peter K. Lechner.
- *6390 Preferential Binding of Radiolabeled Poly-L-lysines to C6 and U87 MG Glioblastomas Compared with Endothelial Cells *in Vitro*. Steven E. Kornguth, Tom Kalinke, H. Ian Robins, Justin D. Cohen, and Patrick Turski.
- 6396 Alteration of Pancreatic Endocrine Cell Patterns and Their Secretion during Pancreatic Carcinogenesis in the Hamster Model. Parviz M. Pour and Richard H. Bell.
- *6401 Human Monoclonal Antibody (HMST-1) against Lacto-Series Type 1 Chain and Expression of the Chain in Uterine Endometrial Cancers. Shiro Nozawa, Sonoko Narisawa, Kyoko Kojima, Motoko Sakayori, Rihachi Iizuka, Hiroshi Mochizuki, Tadakazu Yamauchi, Masao Iwamori, and Yoshitaka Nagai.
- *6407 Stimulation of Epithelial Membrane Antigen Expression by Transforming Growth Factor- β in Normal and Oncogene-transformed Human Mammary Epithelial Cells. Dorothy Walker-Jones, Eva M. Valverius, Martha R. Stampfer, Marc E. Lippman, and Robert B. Dickson.
- *6412 Generation of a Monoclonal Antibody (G9) Reactive with an Organ-specific, Tumor-associated Epitope of Human Colon Carcinoma. David V. Gold, Glorietta Ishizaki, Pamela Keller, and Karen Lew.
- 6419 Evaluation of the Cocarcinogenic Effect of Wounding in Rous Sarcoma Virus Tumorigenesis. Michael H. Sieweke, Andrew W. Stoker, and Mina J. Bissell.
- 6425 Detection of Transforming *ras* Proteins Containing Leucine at Position 61 by a New Mouse Monoclonal Antibody, *ras*(53-69)Leu61. Diane Bizub, Elyn Fischberg-Bender, Edgar P. Heimer, Arthur Felix, and Anna Marie Skalka.

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

- 6432 Phase I Clinical Trial of Interleukin 2 and α -Interferon: Toxicity and Immunologic Effects. G. T. Budd, B. Osgood, B. Barna, J. M. Boyett, J. Finke, S. V. Medendorp, S. Murthy, C. Novak, J. Sergi, R. Tubbs, and R. M. Bukowski.
- 6437 Phase I Trial of Hepatic Artery Infusion of 5-Iodo-2'-deoxyuridine and 5-Fluorouracil in Patients with Advanced Hepatic Malignancy: Biochemically Based Combination Chemotherapy. Scot C. Remick, Al B. Benson III, James L. Weese, James K. V. Willson, Guillermo Ramirez, George W. Wirtanen, Dona B. Alberti, Lavonne M. Nieting, Kendra D. Tutsch, Paul H. Fischer, and Donald L. Trump.

* * *

Letter to the Editor

- 6443 Correspondence re: Larry Norton, A Gompertzian Model of Human Breast Cancer Growth. *Cancer Res.*, 48: 7067-7071, 1988. Michael Retsky, Douglas Swartzendruber, Robert Wardwell, Paul Bame, and Victor Petrosky. Reply by Larry Norton.
- 6445 Announcements
Eighty-first Annual Meeting of the AACR
AACR Special Conferences in Cancer Research
Future Annual Meetings of the AACR
Collected Perspectives in Cancer Research
Study Sets of Histological Slides of Rodent Tumors
Calendar of Events
- 6447 Author Index
- 6448 Statement of Ownership, Management and Circulation

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

- 1990 Employment Register Forms and Instructions
- Application for Active and Corresponding Membership
- Application for Associate Membership

Cancer Research

VOLUME 49 • NUMBER 22

CONTENTS Arranged by Subject Category

BASIC SCIENCES

Biochemistry and Biophysics

- *6185 **Cross-Resistance and Glutathione-S-transferase- π Levels among Four Human Melanoma Cell Lines Selected for Alkylating Agent Resistance.** Yenyun Wang, Beverly A. Teicher, Thomas C. Shea, Sylvia A. Holden, Kristina W. Rosbe, Antoine Al-Achi, and W. David Henner.
- *6202 **Altered Formation of DNA in Human Cells Treated with Inhibitors of DNA Topoisomerase II (Etoposide and Teniposide).** Ulf Lönn, Sigrid Lönn, Urban Nylen, and Gerard Winblad.
- 6242 **Altered Adrenergic Response and Specificity of the Receptors in Rat Ascites Hepatoma AH130.** Fujiko Sanae, Ken-ichi Miyamoto, and Ryozo Koshiura.
- *6258 **Sialyltransferase Levels and Ganglioside Expression in Melanoma and Other Cultured Human Cancer Cells.** Immac J. Thampoe, Koichi Furukawa, Eugenia Vellvé, and Kenneth O. Lloyd.
- 6425 **Detection of Transforming *ras* Proteins Containing Leucine at Position 61 by a New Mouse Monoclonal Antibody, *ras*(53-69)Leu61.** Diane Bizub, Ellyn Fischberg-Bender, Edgar P. Heimer, Arthur Felix, and Anna Marie Skalka.

Carcinogenesis

- 6174 **Formation of Cyclic 1,*N*²-Propanodeoxyguanosine and Thymidine Adducts in the Reaction of the Mutagen 2-Bromoacrolein with Calf Thymus DNA.** John H. N. Meerman, Timothy R. Smith, Paul G. Pearson, G. Patrick Meier, and Sidney D. Nelson.
- 6180 **Influence of Vitamin B₂ on Formation of Chromium(V), Alkali-labile Sites, and Lethality of Sodium Chromate(VI) in Chinese Hamster V-79 Cells.** Masayasu Sugiyama, Akikazu Ando, Kumi Nakao, Hiroshi Ueta, Toshihiro Hidaka, and Ryohei Ogura.
- 6193 **Characterization of the Hydroperoxide Response Observed in Mouse Skin Treated with Tumor Promoters *in Vivo*.** Elisabeth M. Perchellet and Jean-Pierre Perchellet.
- 6300 **Effects of Dietary Fat, Calcium, and Vitamin D on Growth and Mammary Tumorigenesis Induced by 7,12-Dimethylbenzo(*a*)anthracene in Female Sprague-Dawley Rats.** E. Ann Jacobson, Kathi A. James, Harold L. Newmark, and Kenneth K. Carroll.
- *6304 **Roles of Individual Human Cytochrome P-450 Enzymes in the Bioactivation of Benzo(*a*)pyrene, 7,8-Dihydroxy-7,8-dihydrobenzo(*a*)pyrene, and Other Dihydrodiol Derivatives of Polycyclic Aromatic Hydrocarbons.** Tsutomu Shimada, Martha V. Martin, Donna Pruess-Schwartz, Lawrence J. Marnett, and F. Peter Guengerich.
- 6342 **Apoptosis (Cell Death) Induced in Mouse Bowel by 1,2-Dimethylhydrazine, Methylazoxymethanol Acetate, and γ -Rays.** Kenichi Ijiri.
- 6369 **Promoting Effects of Unleaded Gasoline and 2,2,4-Trimethylpentane on the Development of Atypical Cell Foci and Renal Tubular Cell Tumors in Rats Exposed to *N*-Ethyl-*N*-hydroxyethylnitrosamine.** Brian G. Short, William H. Steinhagen, and James A. Swenberg.

- 6396 **Alteration of Pancreatic Endocrine Cell Patterns and Their Secretion during Pancreatic Carcinogenesis in the Hamster Model.** Parviz M. Pour and Richard H. Bell.

Endocrinology

- *6237 **Growth Inhibition of Human Breast Cancer Cells *in Vitro* with an Antibody against the Type I Somatomedin Receptor.** Carlos L. Arteaga and C. Kent Osborne.
- 6295 **Anti estrogen Inhibition of Prolactin-induced Growth of the Nb2 Rat Lymphoma Cell Line.** Ratna Biswas and Barbara K. Vonderhaar.
- *6352 **Characterization of Receptors for α -Melanocyte-stimulating Hormone on Human Melanoma Cells.** Walter Siegrist, Flavio Solca, Sibylla Stutz, Laura Giuffrè, Stefan Carrel, Jürg Girard, and Alex N. Eberle.

Immunology

- 6252 **Hyperthermic Modulation of Respiratory Inhibition Factor- and Iron Releasing Factor-dependent Macrophage Murine Tumor Cytotoxicity.** Jim Klostergaard, Marketa Barta, and Stephen P. Tomasovic.
- *6280 **Mediation of Anorexia by Human Recombinant Tumor Necrosis Factor through a Peripheral Action in the Rat.** Richard J. Bodnar, Gavril W. Pasternak, Phyllis E. Mann, Dennis Paul, Robert Warren, and David B. Donner.
- *6401 **Human Monoclonal Antibody (HMST-1) against Lacto-Series Type 1 Chain and Expression of the Chain in Uterine Endometrial Cancers.** Shiro Nozawa, Sonoko Narisawa, Kyoko Kojima, Motoko Sakayori, Rihachi Iizuka, Hiroshi Mochizuki, Tadakazu Yamauchi, Masao Iwamori, and Yoshitaka Nagai.
- *6412 **Generation of a Monoclonal Antibody (G9) Reactive with an Organ-specific, Tumor-associated Epitope of Human Colon Carcinoma.** David V. Gold, Glorietta Ishizaki, Pamela Keller, and Karen Lew.

Molecular Biology and Genetics

- *6247 **Assignment of Common Allele Loss in Osteosarcoma to the Subregion 17p13.** Junya Toguchida, Kanji Ishizaki, Yusuke Nakamura, Masao S. Sasaki, Mituo Ikenaga, Mitsuo Kato, Masayuki Sugimoto, Yoshihiko Kotoura, and Takao Yamamuro.
- *6324 **Detection of Point Mutations in *N-ras* and *K-ras* Genes of Human Embryonal Rhabdomyosarcomas Using Oligonucleotide Probes and the Polymerase Chain Reaction.** M. R. Stratton, C. Fisher, B. A. Gusterson, and C. S. Cooper.

Preclinical Pharmacology and Experimental Therapeutics

- 6169 **Ability of the α and β Anomers of Chlorozotocin to Kill Rat 9L Tumor Cells *in Vitro*.** Ka-Ho Wong and Kenneth T. Wheeler.
- 6208 **Interaction of PtCl₄(Fast Black)₂ with Hyperthermia.** Beverly A. Teicher, Terence S. Herman, M. Raphael Pfeffer, Enrique Alvarez Sotomayor, and Vrinda S. Khandekar.
- 6214 **Monoclonal Antibody Targeting of Liposomes to Mouse Lung *in Vivo*.** Brenda J. Hughes, Stephen Kennel, Ray Lee, and Leaf Huang.

* Indicates studies using human-derived material.

- *6226** Major Increases in Spermidine/Spermine-*N*¹-Acetyltransferase Activity by Spermine Analogues and Their Relationship to Polyamine Depletion and Growth Inhibition in L1210 Cells. Paul R. Libby, Mark Henderson, Raymond J. Bergeron, and Carl W. Porter.
- 6265** Possible Role of Inhibition of Glutathione *S*-Transferase in the Partial Reversal of Chlorambucil Resistance by Indomethacin in a Chinese Hamster Ovary Cell Line. Andrew Hall, Craig N. Robson, Ian D. Hickson, Adrian L. Harris, Stephen J. Proctor, and Alex R. Cattani.
- 6275** Enhancement of Anthracycline Growth Inhibition in Parent and Multidrug-resistant Chinese Hamster Ovary Cells by Cyclosporin A and Its Analogues. Setsuko K. Chambers, William N. Hait, Barry M. Kacinski, Susan R. Keyes, and Robert E. Handschumacher.
- *6285** Cytotoxic Interactions of Heat and an Ether Lipid Analogue in Human Ovarian Carcinoma Cells. Keiichi Fujiwara, Edward J. Modest, Charles E. Welander, and C. Anne Wallen.
- 6290** Relationship between Tumor Size and Curability of Prostatic Cancer by Combined Chemo-Hormonal Therapy in Rats. John T. Isaacs.
- *6318** Expression of Human DNA Topoisomerase I in Yeast Cells Lacking Yeast DNA Topoisomerase I: Restoration of Sensitivity of the Cells to the Antitumor Drug Camptothecin. Mary-Ann Bjornsti, Piero Benedetti, Gregory A. Viglianti, and James C. Wang.
- 6328** Pharmacokinetics and Systemic Bioavailability of Menogaril, an Anthracycline Antitumor Agent, in the Mouse, Dog, and Monkey. Wade J. Adams, J. Patrick McGovern, Evelyn A. Dalm, Jack E. Brewer, and John D. Hosley.
- 6337** Toxicity of Methotrexate in Rats Preexposed to Nitrous Oxide. Anton A. M. Ermens, Martijn Schoester, Lidwien J. M. Spijkers, Jan Lindemans, and Johan Abels.
- 6359** Dose-dependent Pharmacokinetics of Methotrexate and 7-Hydroxymethotrexate in the Rat *in Vivo*. Roy M. Bremnes, Lars Slørdal, Erik Wist, and Jarle Aarbakke.
- 6365** Differential Requirement of DNA Replication for the Cytotoxicity of DNA Topoisomerase I and II Inhibitors in Chinese Hamster DC3F Cells. Christine Holm, Joseph M. Covey, Donna Kerrigan, and Yves Pommier.
- *6379** ³¹P-Nuclear Magnetic Resonance Studies of the Effect of Recombinant Human Interleukin 1 α on the Bioenergetics of RIF-1 Tumors. Ioannis Constantinidis, Paul G. Braunschweiger, Janna P. Wehrle, Nirmal Kumar, Candace S. Johnson, Philip Furmanski, and Jerry D. Glickson.
- *6383** Yttrium-90 and Iodine-131 Radioimmunoglobulin Therapy of an Experimental Human Hepatoma. Jerry L. Klein, Thi Hien Nguyen, Philippe Laroque, Kenneth A. Kopfer, Jerry R. Williams, Barry W. Wessels, Larry E. Dillehay, James Frincke, Stanely E. Order, and Peter K. Lechner.
- *6232** Potentiation of Interferon Induction of Class I Major Histocompatibility Complex Antigen Expression by Human Tumor Necrosis Factor in Small Cell Lung Cancer Cell Lines. Garry M. Marley, L. Austin Doyle, José V. Ordóñez, Allison Sisk, Arif Hussain, and Ray-Whay Chiu Yen.
- *6269** Production of and Responsiveness to Transforming Growth Factor- β in Normal and Oncogene-transformed Human Mammary Epithelial Cells. Eva M. Valverius, Dorothy Walker-Jones, Susan E. Bates, Martha R. Stampfer, Robin Clark, Frank McCormick, Robert B. Dickson, and Marc E. Lippman.
- 6313** Effect of Intraperitoneal *versus* Intravenous Glucose Administration on Laser Doppler Flow in Murine FSaII Tumors and Normal Skin. J. Kalmus, P. Okunieff, and P. Vaupel.
- *6347** DNA *in Situ* Sensitivity to Denaturation as a Marker of Human Breast Tumors. J. E. Kunicka, W. Olszewski, P. P. Rosen, M. Kimmel, M. R. Melamed, and Z. Darzynkiewicz.
- *6390** Preferential Binding of Radiolabeled Poly-L-lysines to C6 and U87 MG Glioblastomas Compared with Endothelial Cells *in Vitro*. Steven E. Kornguth, Tom Kalinke, H. Ian Robins, Justin D. Cohen, and Patrick Turski.
- *6407** Stimulation of Epithelial Membrane Antigen Expression by Transforming Growth Factor- β in Normal and Oncogene-transformed Human Mammary Epithelial Cells. Dorothy Walker-Jones, Eva M. Valverius, Martha R. Stampfer, Marc E. Lippman, and Robert B. Dickson.

Virology

- 6419** Evaluation of the Cocarcinogenic Effect of Wounding in Rous Sarcoma Virus Tumorigenesis. Michael H. Sieweke, Andrew W. Stoker, and Mina J. Bissell.

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

- 6432** Phase I Clinical Trial of Interleukin 2 and α -Interferon: Toxicity and Immunologic Effects. G. T. Budd, B. Osgood, B. Barna, J. M. Boyett, J. Finke, S. V. Medendorp, S. Murthy, C. Novak, J. Sergi, R. Tubbs, and R. M. Bukowski.
- 6437** Phase I Trial of Hepatic Artery Infusion of 5-Iodo-2'-deoxyuridine and 5-Fluorouracil in Patients with Advanced Hepatic Malignancy: Biochemically Based Combination Chemotherapy. Scot C. Remick, Al B. Benson III, James L. Weese, James K. V. Willson, Guillermo Ramirez, George W. Wirtanen, Dona B. Alberti, Lavonne M. Nieting, Kendra D. Tutsch, Paul H. Fischer, and Donald L. Trump.

* * *

Letter to the Editor

- 6443** Correspondence re: Larry Norton, A Gompertzian Model of Human Breast Cancer Growth. *Cancer Res.*, 48: 7067-7071, 1988. Michael Retsky, Douglas Swartzendruber, Robert Wardwell, Paul Bame, and Victor Petrosky. Reply by Larry Norton.
- 6445** Announcements
Eighty-first Annual Meeting of the AACR
AACR Special Conferences in Cancer Research
Future Annual Meetings of the AACR
Collected Perspectives in Cancer Research
Study Sets of Histological Slides of Rodent Tumors
Calendar of Events
- 6447** Author Index
- 6448** Statement of Ownership, Management and Circulation

Tumor Biology

- *6221** Aberrant Expression of Epidermal Growth Factor Receptor and HER-2 (*erbB-2*) Messenger RNAs in Human Renal Cancers. Michael R. Freeman, Robert Washecka, and Leland W. K. Chung.

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

- 1990 Employment Register Forms and Instructions
- Application for Active and Corresponding Membership
- Application for Associate Membership

Cancer Research

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

49 (22)

Cancer Res 1989;49:6169-6446.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/49/22.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/49/22.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.